SURVEY OF LIFE SCIENCES
COMPUTER PROGRAMS

IBRAHIM B. HAMMIDI

With collaboration of

LILLIAM DRESHER
CAROL S. WADE

FOREWORD

This final technical documentary report prepared at the International Business Machines Corporation, Thomas J. Watson Research Center, P. O. Box 218, Yorktown Heights, New York, covering the period 15 July 1963 through 14 July 1964 is submitted to the Aerospace Medical Research Laboratories, Aerospace Medical Division, Wright-Patterson Air Force Base, Ohio, under contract AF33(657)-11347, and in support of Project No. 7233, "Biological Information Handling Systems and Their Functional Analogs," and Task No. 723305, "Theory of Information Handling." The principal investigator under the contract was Satosi Watanabe and the Air Force program monitor was Hans L. Oestreicher, Chief, Mathematics and Analysis Branch, Biodynamics and Bionics Division, Biophysics Laboratory.

This technical report has been reviewed and is approved.

J. W. HEIM, PhD
Technical Director
Biophysics Laboratory
Aerospace Medical Research Laboratories

ABSTRACT

A need exists for dissemination of information on the uses of computers in the life sciences. This report attempts to provide the information necessary to locate and request programs or program descriptions and listings. Typical applications in the life sciences are described for general programs on information retrieval, cross-tabulation of data, tests of statistical hypotheses, regression analysis, multivariate analysis, time series analysis, analysis of variance and covariance, mathematical diagnosis, linear programming, simulation, numerical techniques, and matrix algebra. In addition to these general purpose programs, many special purpose programs exist which are applicable within the gamut of research problems. Some specific examples are finding interatomic distances and angles, blood volume analysis, cardiac arrythmia analysis, etc. The Key-Word-in-Context (KWIC) - Index of life sciences computer programs consisting of 1) the Key-Word Index, 2) Author Index, and 3) Code-Name Index is given in the final section of the report.

TABLE OF CONTENTS

SECTION I

INTRODUCTION

Much has already been written on the uses of computers in the life sciences. The breadth of reports and technical articles has been more than sufficient to interest investigators working in scientific environments. The desire to make use of a new technology and a new methodology has been somewhat constrained by the availability of computing centers and more so by the availability of programs. In the last four years, there has been an increase both of biomedically oriented computing centers, some of which are listed in table 1, and of packaged biomedical programs. The communication of the relative availability (explained below) of these programs to the general scientific community has been less successful (BMD and MEDCOMP[1] excepted), for a number of reasons, some of which might be related to the general laxity of programmers properly to document their endeavors and, no less important a reason, to the burden that a center would have to assume in order to distribute and maintain the programs. As a consequence, the average biomedical investigator, limited in resources, has had some difficulty in locating or even being aware of the existence of programs important to his research.

The survey and the Key-Word-in-Context (KWIC) Index of life sciences computer programs, presented here, are an attempt to provide the investigator with the information necessary to locate and request any program or, at the least, an adequate program description and listing. This compilation is concerned with numerical programs only and does not consider library programs for the retrieval of biomedical literature information.

The format used to document the programs and an explanation of the entries in the forms used will be found in Appendix I. Of the many sources contacted, those listed in table 2 have contributed a large group of programs. Some of these programs have been widely distributed for instance, BMD and MEDCOMP.

In Appendix II a list of NIH computer oriented grants has been added to facilitate communication among investigators and users in this field.

---

[1] BMD, MEDCOMP, XTAB, are code names for computer program libraries maintained at the institutions designated in table 2.

TABLE 1

LIFE SCIENCES COMPUTER CENTERS

ORGANIZATION	PROJECT OFFICER
Aerospace Medical Research Laboratories (MRBAM), Wright Patterson Air Force Base, Ohio	Oestreicher, H. L.
Alabama, University of, Birmingham, Alabama	Jamison, H. C.
Arkansas, University of, Little Rock, Arkansas	Barnhard, H. J.
California, University of, Los Angeles, California	Dixon, W. J.
Central Institute for the Deaf, St. Louis, Missouri	Cox, J. R.
Chicago, University of, Chicago, Illinois	Meier, P.
Cincinnati, University of, College of Medicine, Cincinnati, Ohio	Sterling, T. D.
Clark University, Worcester, Massachusetts	Stubbe, J. S.
Colorado, University of, Medical Center, Denver Colorado	Eisele, C. W.
Fels Research Institute, Yellow Springs, Ohio	Sontag, L. W.
Harvard University, Cambridge, Massachusetts	Bartholomay, A. F.
Johns Hopkins University, Baltimore, Maryland	Shepard, R. H.
Massachusetts Institute of Technology, Cambridge, Massachusetts	Barnett, M. P.
Mayo Association, Rochester, Minnesota	Ackerman, E.
Medical College of Virginia, Richmond, Virginia	Ham, W. T.
Memorial Hospital for Cancer and Allied Diseases, New York, New York	Laughlin, J. S.
New Mexico Highlands University, Las Vegas, New Mexico	McConnon, M.
New York, State University of, Buffalo, New York	Ewell, R.
New York University, New York, New York	Cady, L. D. Woodbury, M. A.
North Carolina, University of, Chapel Hill, North Carolina	Mason, D. D.
Oklahoma, University of, Oklahoma City, Oklahoma	Schottstaedt, W. W.
Pennsylvania, University of, Philadelphia, Pennsylvania	Garfinkel, D.
School of Aviation Medicine, USAF, Brooks Air Force Base, Texas	Danford, B. M.
Seton Hall University, Medical Center, South Orange, New Jersey	Lynch, F. L.
Texas, University of, Postgraduate School of Medicine, Houston, Texas	Mountain, C. F. Taylor, G.
Tulane University, New Orleans, Louisiana	Sweeney, J. W.
Utah, University of, Salt Lake City, Utah	Warner, H. R.
Western Reserve University, Cleveland, Ohio	Badgen, G. F.

2

TABLE 2

LIFE SCIENCES COMPUTER PROGRAM LIBRARIES

Biological Sciences Computation Center, University of Chicago,
Chicago, Illinois
College of Education, University of Texas, Austin, Texas
Computation Center, University of Michigan, Ann Arbor, Michigan
Computer Center, Washington University, St. Louis, Missouri
Health Sciences Computing Facility, School of Medicine,
University of California at Los Angeles (BMD), Los Angeles, Calif.
Health Sciences Computing Facility, School of Medicine,
University of California at Los Angeles (XTAB), Los Angeles, Calif.
Medical Computing Center, College of Medicine, University of
Cincinnati (MEDCOMP), Cincinnati, Ohio
National Institutes of Health Library
Research Computation Center, University of Texas, Medical Branch,
Galveston, Texas
University of Illinois (ILLIAC Statistical Library), Urbana, Illinois

3

SECTION II

GENERAL REVIEW OF LIFE SCIENCES COMPUTER PROGRAMS

The programs described below are basically general codes that have been used on many different biological applications. Mostly statistical in nature, they are basically suited to the investigator who is ordering, analyzing and classifying information collected in the laboratory, hospital ward, from psychological tests, and so on. There are programs on information retrieval, cross-tabulation of data, tests of statistical hypotheses, regression analysis, multivariate analysis, time series analysis, analysis of variance and covariance, mathematical diagnosis, linear programming, simulation, numerical techniques, matrix algebra, etc.

Information retrieval techniques are frequently oriented toward the unit record approach (sorters, statistical sorters, collators) using either the so-called look-up principle (where document numbers are listed under key word headings and retrieval is made by referring to the record for each key word stated in the query and comparing these key word records for matching document numbers) or the search principle (where key words are listed under document numbers and retrieval is made by comparing key words of the query against the key words on each document record). These techniques are well known, well documented by users, computer manufacturers and no particular effort was made in this survey to gather information on these applications. Some of those reported include a program to retrieve death records for any combination of selected courses of death and patient characteristics and another program which searches a three-card descriptor of articles in order to prepare a bibliography with one to six requirements for inclusion. National Institute of Health (NIH) supported information retrieval projects (table 3) include bibliographic research in psychopharmacology, analysis of medical classifications, documentation of communicable disease literature, etc. The problem of the automatic preparation of medical records in medical institutions and the control of and access to medical information is part of a number of studies related to hospital communication systems, some of which are listed in table 4.

Cross-tabulation programs are useful for pre-editing data collected, in most cases, over a number of years and whose characteristics may be important prior to attempting the use of statistical techniques such as regression and multivariate analysis. These programs plot or compute some of the following: range of data, highs and lows, scattergrams, histogram generation, frequency distributions, basic statistical characteristics of distributions such as means, standard deviations, confidence limits, plotting, classifications of variables

4

TABLE 3

NIH-SUPPORTED INFORMATION RETRIEVAL STUDIES

ORGANIZATION	INVESTIGATOR
American Chemical Society, Columbus, Ohio	Dyson, G. M.
American Institute of Biological Sciences, Washington, D. C.	Shilling, C. W.
Brown University, Providence, Rhode Island	Kingsland, L. C.
California, University of, Los Angeles, California	Lamson, B. G.
Commission on Professional and Hospital Activities, Inc., Ann Arbor, Michigan	Kincaid, W. H.
Institute for the Advancement of Medical Communications, New York, New York	Orr, R. H.
Institute for Scientific Information, Inc., Philadelphia, Pennsylvania	Garfield, E.
Massachusetts Mental Health Research Corporation, Boston, Massachusetts	Geller, M. R.
Pittsburgh, University of, Pittsburgh, Pennsylvania	Horty, J. F.
Tulane University, New Orleans, Louisiana	Schenthal, J. E.
Western Reserve University, Cleveland, Ohio	Kent, A.
Yale University, New Haven, Connecticut	Henderson, V. A. Raisig, L. M.
Zator Company, Cambridge, Massachusetts	Mooers, C. N. Solomonoff, R. J.

5

TABLE 4

HOSPITAL INFORMATION STUDIES

ORGANIZATION	INVESTIGATOR
Brown University, Providence, Rhode Island	Kingsland, L. C.
Camarillo State Hospital, Camarillo, California	Graetz, R. E.
Case Institute of Technology, Cleveland, Ohio	Camp, G. D.
Johns Hopkins Hospital, Baltimore, Maryland	Flagle, C. D.
Memorial Hospital of Long Beach, Long Beach, California	Lake, R. L.
Stanford Research Institute, Menlo Park, California	Blumberg, M. S.

6

into intervals and computation of statistical measures, percentile computations, cross-classification of variables (one-way , two-way and three-way cross-tabulations with frequencies, histograms, means standard deviations and Chi-square) and various other summary statistics. MEDCOMP (University of Cincinnati) and XTAB (UCLA, Massey) have a number of programs that fall into this category.

Regression analysis techniques are commonly used in most biomedical centers and programs of various flexibility and generality exist. Frequently, these programs will allow a transformation or a transgeneration of the original variables. It is thus possible to obtain trigonometric, logarithmic, algebraic, inverse trigonometric and exponential function transformations. Simple linear regression programs are available accepting a maximum of two independent variables up to 130 independent variables, with intermediate programs handling 6 to 100 independent variables. Other types of regression programs include polynomial regression (up to a 19th degree polynomial), periodic and harmonic regression (up to the 9th harmonic), asymptotic regression (Logistic and Gompertz curves), exponential (maximum likelihood criteria) and double exponential regression, stepwise regression (where at each regression step, that variable which makes the greatest reduction in the error sum of squares is added to the previous variables), surface plane fitting, non-linear regression (by a modified Gaussian procedure), non-linear estimation (variable metric method) and so on. Some of the regression programs have multiple outputs including means, standard deviations, correlation and covariance matrix, analysis of variance of regressions, partial correlations, residuals, etc.

Correlation programs include such outputs as Pearson's product moment correlation, using complete or incomplete data; multiple correlation coefficients; tetrachoric correlation coefficients, which are measures of the linear association between two variables when both are dichotomized; biserial correlations, where one variable is quantitatively measured while the other is dichotomized; and so on.

These programs are widely used in psychology and the biological sciences.

Another set of programs is used in the statistical tests of hypotheses: Chi-square, which tests whether the observed frequencies in a distribution differ significantly from the frequencies which might be expected; T-test, which tests the significance of the difference between two means; F-test to test the significance of sample variances; Scheffe test to compare individual means in the analysis of variance; Marshall test which tests the hypothesis that one of two random variables is stochastically larger than the other; Bartlett test, which tests whether two or more variances differ significantly from each other; Fisher's Z transformation to test the significance of the differences between correlations; and so on.

Multivariate analysis programs, frequently used in the behavioral sciences, make up a large category. Factor analysis, a statistical procedure whose purpose is to express the original variables in terms of a smaller set of independent variables called factors, has been widely used. One program performs a principal component solution and a varimax (Kaiser, 1959) rotation of the factor matrix (up to 80 variables). Other real or complex factor analysis programs perform a principal axis analysis using a Quartimax (Neuhaus & Wrigley, 1954), an Oblimax (Saunders, 1961) or a Maxplane (Cattell & Muerle, 1960) rotation criterion. The number of variables ranges from 40 to 155 and the number factors from 10 to 30. Canonical Analysis, developed by Hotelling (1935, 1936), is a procedure used to correlate two sets of variables. Both multiple criteria and multiple predictors are used in the analysis; for example, in the comparison of different batteries of vocational interest (up to 100 variates and 26 variables). There are discriminant analysis programs regarding group memberships, probabilities of membership in each group; taxonomic optimization programs which use a maximization of the covariance among the variables as a criterion of classification (up to 125 cases, 235 attributes per case); hierarchical grouping analysis programs based on distances in the test space; and so on. There are item analysis and test scoring programs (up to 600 item choices and 100,000 subjects); pattern analytic methods, used also in psychology, include profile analysis programs (up to 66 questions and 10,000 participants) and agreement analysis programs, a subset of configural analysis, used for the analysis of patterns of behavior. Results of agreement analysis programs would include: agreement scores, ranked agreement scores, highest agreement score among persons of a population, etc. Programs also exist on Guttman Scale Analysis used in the study of attitudes, opinions, symptoms (program assigns proper weight to the given data on variables, ranks

8

the cases and assigns a Guttman Scale score for each case); and Probit analysis for response bio-array data (program computes the maximum likelihood solution of the dosage response curve, co-variance matrix, Chi-square, etc.).

Analysis of variance programs, important in experimental and factorial design, are many (2, 3 and 4-way analysis of variance). Number of factors ranges from 8 to 100 with various numbers of levels, and equal or unequal number of observations in the cells.

Time Series Analysis is used both in psychology and in the analysis of stationary, ergodic, random signals (electroencephalograph (EEG)). A number of techniques are used: Auto-correlation (up to 795 observations); Auto covariance and Cross-spectral analyses; trend corrected auto and cross correlation analysis; frequency analysis of correlogram functions; amplitude and phase analysis; period analysis (including frequency count of base line crossings and zero crossings of first derivative); Fourier series curve fitting to periodic functions and so on.

Linear programming codes have been used in primary protein structure determination; analysis of spectrographic data, by mini-mization of the rms error; and blood chemistry simulation. Mathe-matical diagnosis is represented by a number of programs using conditional probability (Warner: 50 symptoms and 33 diseases; Bruce: 400 symptoms and 40 diseases; Overall: 21 symptoms, 3 diseases; Gustafson) for the diagnosis of congenital heart disease, and thyroid function. Regression analysis was used (14 independent variables) for the diagnosis of coronary artery disease (Ward) and by matching signifi-cant characteristics, Lipkin, et al. used a program in the differential analysis of hematological diseases. Clustering (Bonner), taxonomy and pattern recognition (electrocardiograph (EKG) interpretation) programs have also been reported.

A set of programs on matrix manipulations is also included in this survey. These are matrix inversion programs, real and complex matrix multiplication, determinant evaluation, etc.

Almost all of the programs reviewed above are general purpose in the sense that they can be used on a variety of biological problems. Special programs are as varied as scientific research itself. A sampling of these programs would include: sample analysis of radio-active isotope detection, radiation treatment planning, radiation distribution of implants, specific programs to find such things as interatomic distances and angles, absorption factors for a crystal ground as an ellipsoid of revolution, blood volume analysis, neutron activation analysis, cardiac arrythmia analysis and so on.

9

SECTION III

KWIC-INDEX ON LIFE SCIENCES COMPUTER PROGRAMS

Explanation For Use

1. This KWIC-index assigns a nine-letter code name to each computer program.   The first six letters derived from the (first co-) author's name, and the last three letters derive from the title of the program.

2. If more than one program receives the same code-name by the above method, a two-digit number is inserted between the first group of six letters and the second group of three letters to distinguish different programs.

3. This KWIC-index consists of three parts.   Part A: Key-Word Index, Part B: Author Index and Part C: Code-Name Index.

4. The Code-Name Index gives (i) the author, (ii) the address or the instruction, (iii) the program library if the program belongs to one (iv) the program code-number, if any, (v) the title, followed by an equal sign.   After the equal sign, the nature of the program is briefly explained.   "3A" gives a general mathematical description.   "3B" determines the limitations. "4" indicates the application. "5" specifies the computer configuration. "6" gives the source from which the program or its explanation can be obtained.   For more details, see Section II, of this report.

5. Example:

    BRAUML - - SDA   Braunstein ML

    Sequential Dependencies Analysis to Measure
    Redundancies in Sequences of Stimuli
    Responses. =

    (5) IBM 704 FORTRAN II (6) Photoduplication
    Svce. Lc. Wash DC DOC 6720

10

PART A

KEY-WORD INDEX

```
PROGRAM TO COMPUTE THE ABSCISSA FROM THE AREA OR DERIVATIVE       DEPTHE-G8-GNN
UND AS AN + ICR NO 10 ' ABSORPTION FACTORS FOR A CRYSTAL GRO       PATTAL-   -INA
              ZO BSC AC PEDIATRIC CORRELATION PH 1.=               MEIEP -   -ZBA
TRIGCNOMETRIC FUNCTIONS ACCORDING TO BRAGG'S LAW FOR THE           PARNBL-   -TFA
          (REACTCR ISOTOPE ACCOUNT)--THE PROGRAM PREPARES YEAR     OGBORE-   -SSR
             ISOTOPE ACCOUNTABILITY.=                             OGBORE-   -IA
ANALYSIS.=      G2-HADF- ACSASM AUTOCORRELATION AND SPECTRAL       DEPTHE-   -GHA
GRAM TO COMPUTE FALLOUT ACTIVITY IN AN AIR SAMPLE.=    + PRO       OGBURE-   -ABA
     ACTIVITY OR SAMPLE ACTIVITY OF A SAMPLE OR THE NEUTRON        OGBORE-   -SSA
   PROGRAM TO DETERMINE ACTIVITY OF NEURON IRRADIATED SAMPLE       OGBORE-   -SAV
      RECORD --COMPUTES ACTIVITY OF SAMPLE, PRODUCED AND           OGBORE-   -RCI
   SATURATION, SPECLFIC ACTIVITY OR SAMPLE ACTIVITY OF A           OGBORE-   -SSA
  PREPARES YBAR TOTAL OF ACTIVITY PER ELEMENT.=     + PROGRAM      OGBORE-   -SSR
 ACTIVITY, FLUX, SAMPLE ACTIVITY--THE PROGRAM DETERMINES           OGBORE-   -SSA
PROGRAM TO DETER+SAMPLE ACTIVITY--VARIABLE TIME--A COMPUTER        OGBORE-   -SAV
   SATURATION, SPECIFIC ACTIVITY, FLUX, SAMPLE ACTIVITY--THE       OGBORE-   -SSA
C FO2 SURVIVAL TABLES ( ACTUARIAL METHOD).=           GO UO        MEIEP -G9-GUF
C-BIN SURVIVAL TABLES ( ACTUARIAL METHOD).=           GO-UO        MEIEP -   -GUB
=                        ACTUARIAL SURVIVAL RATE COMPUTATION.      PARNBL-   -ASR
AL SPECTRA TO + SPECTRA ADDER--A PROGRAM WHICH ADDS INDIVIDU       OGBURE-   -SAP
 ADDER--A PROGRAM WHICH ADDS INDIVIDUAL SPECTRA TO CREATE A        OGBORE-   -SAP
ALYSIS OF VARIANCE COV. ADJUST.=+HED FO2 TWO TO THREE WAY AN       MEIEP -04-GHF
EXPLORATION OF FAMILIAR AGGREGATIONS OF DISEASE.= + FOR THE        FRAN  -   -TPP
RAM THAT COMPUTES JOINT AGREEMENT PATTERNS.=+ FORM G, A PROG       DICKKW-   -KAP
M THAT COMPU+KSL 2.93-- AGREEMENT PATTERNS, FORM G, A PROGRA       DICKKW-   -KAP
GRAM FINDS + KSL 2.94-- AGREEMENT PATTERNS, FORM H, THIS PRO       DICKKW-01-KAP
        FINDS THE HIGHEST AGREEMENT SCORE AMONG ALL THE PERSON     DICKKW-01-KAP
   AND PRINT A MATRIX OF AGREEMENT SCORES AMONG A SET OF           DICKKW-   -KAS
THAT WILL +  KSL 2.90-- AGREEMENT SCORES, FORM A, A PROGRAM        DICKKW-   -KAS
WHICH +KSL 2.91--RANKED AGREEMENT SCORES, FORM F, A PROGRAM        DICKKW-   -KRA
ILL PRINT ONLY THE HIGH AGREEMENTS PER PERSON.=     + WHICH W      DICKKW-   -KRA
O COMPUTE FALLOUT ACTI+ AIR BACKGROUND ANALYSIS--A PROGRAM T       OGBORE-   -ABA
 FALLCUT ACTIVITY IN AN AIR SAMPLE.=      + PROGRAM TO COMPUTE     OGBORE-   -ABA
A CRYSTAL GRCUND AS AN ALLIPSOID OF REVOLUTION'.=     + FOR        PATTAL-   -INA
            BM001T AMPLITUDE AND PHASE ANALYSIS.=                 DIXOWJ-   -BTA
TWO INDEPENDENT FACTOR ANALYSES.=  + OF FACTOR-VECTORS FROM        VELDDJ-   -MPC
  PRINCIPAL AXIS FACTOR ANALYSIS (C) ORTHOGONAL VARIMAX           VELDDJ-   -FPP
         G2 UCM PROBIT ANALYSIS (DUMMY).=                         MEIEP -   -GUP
         VARIANCE ANALYSIS (FROM UCRBL C014).=                     OGBORE-   -VAU
G2-NIH-NIH020G FACTOR ANALYSIS (MAXIMUM LIKELIHOOD METHOD)         DEPTHE-01-GNN
02 PRINCIPAL COMPONENTS ANALYSIS (RAW SCORES).=     F2 HED F       MEIEP -03-FHF
         FACTOR ANALYSIS (REAL OR COMPLEX).=                       ROSEG -   -FAR
D).=      BLCOD VOLUME ANALYSIS (SIMULTANEOUS ISOTOPE METHO        LANGS -   -BVA
EXPERIMENTAL REGRESSION ANALYSIS (STEPWISE CONDENSATION.=          HAMBRL-   -XER
```

12

```
G2 UCM MIX CORRELATION ANALYSIS (WITH PLOT).=                      MEIEP -05-GUM
        TEST ANALYSIS ITEM ANALYSIS AND FACTOR ANALYSIS AND       WOLFR - -TPT
  PROGRAM FOR CORRELATION ANALYSIS AND GENERAL MULTIPLE REGRES     HOFFPJ- -PCA
  TEM ANALYSIS AND FACTOR ANALYSIS AND ROTATION.= + ANALYSIS I     WOLFR - -TPT
        COMPONENT FACTOR ANALYSIS AND VARIMAX ROTATION ON A        DEPTHE- -GNN
     HIERARCHIAL GROUPING ANALYSIS BASED ON DISTANCES IN TEST      VELDDJ- -GPW
  02 PRINCIPAL COMPONENTS ANALYSIS CORR OR DISPER MATRIX.= + F     MEIEP -02-FHF
  M +BMD05M, DISCRIMINANT ANALYSIS FOR SEVERAL GROUPS A PROGRA     DIXOWJ-01-BMD
     BMD04M, DISCRIMINANT ANALYSIS FOR TWO GROUPS, A PROGRAM       DIXOWJ- -BMD
     FOR TEST SCORING TEST ANALYSIS ITEM ANALYSIS AND FACTOR       WOLFR - -TPT
  RESSION AND CORRELATION ANALYSIS NC.=           + MULTIPLE REG   MEIEP -19-GUF
     G3 UCM MIX TIME SERIES ANALYSIS NO 1.=                        MEIEP -01-GUM
     G3 UCM MIX TIME SERIES ANALYSIS NO 2.=                        MEIEP - -GUM
  IGITAL COMPUTER.=         ANALYSIS OF A PHONOCARDIOGRAM BY A D    HOFLJJ- -APD
      TO LINEAR REGRESSION ANALYSIS OF ALL COMBINATIONS OF         OGBORE- -ELR
  ABLES+LINEAR REGRESSION ANALYSIS OF ALL COMBINATIONS OF VARI     OGBORE- -LRA
  ZING THE SETAR MARK+THE ANALYSIS OF CARDIAC ARRHYTHMIA UTILI     BLACCR- -ACA
           FREQUENCY ANALYSIS OF CORRELOGRAM FUNCTIONS.=           OVERJE- -FAC
  DESIGN.=        BMD03V, ANALYSIS OF COVARIANCE FOR FACTORIAL     DIXOWJ- -BVA
  MULTIGROUP +1MP018--AN ANALYSIS OF COVARIANCE PROGRAM FOR A      STERT - -MAC
               AN ANALYSIS OF COVARIANCE PROGRAM.=                 U OFOF- -ACP
  COVARIATES.=   BMD04V, ANALYSIS OF COVARIANCE WITH MULTIPLE      DIXOWJ-01-BVA
           G4 UCM MIX ANALYSIS OF COVARIANCE.=                     MEIEP -03-GUM
           G4 UCM FOR ANALYSIS OF COVARIANCE.=                     MEIEP -11-GUA
        SIMPLE ONE-WAY ANALYSIS OF COVARIANCE.=                    OVERJE- -SOW
  TO BRAGG'S LAW FOR THE ANALYSIS OF CRYSTAL STRUCTURES.=          PARNBL- -TFA
  TECHNIQUES IN COMPUTER ANALYSIS OF EEG RECORDS IN THE CAT.=      ADEYWR- -APD
  MEANS OF RANDOMIZATION+ ANALYSIS OF EXPERIMENTAL DESIGNS BY      BAKEFB- -AED
   AND CROSS CORRELATION ANALYSIS OF MULTIPLE TIME SERIES.         OVERJE- -ACC
     STATIS (STATISTICAL ANALYSIS OF PERIOD ANALYSIS).=            KIRK  - -SSA
  OUT A TRANSPOSED FACTOR ANALYSIS OF PERSONS, RATHER THAN OF      VELDDJ- -TPC
  I-SQUARE TEST+FREQUENCY ANALYSIS OF QUALITATIVE DATA WITH CH     OVERJE- -FAU
  SINGLE TREATMENT+PROBIT ANALYSIS OF QUANTAL BIOASSAY WITH A      SULZES- -PAQ
     BY A QUALITATIVE ANALYSIS OF SAMPLES (WATER, MILK             CARLJP- -IDP
  PROGRAM FOR INFORMATION ANALYSIS OF SEQUENTIAL DEPENDENCIES.     MCKIJ - -PIA
          COMPUTER ANALYSIS OF SPECTROGRAPHIC DATA.=              WILKT - -CAS
     SPECTRAL DENSITY ANALYSIS OF TIME SERIES.=                    OVERJE- -SDA
  TWIN II-A STATISTICAL ANALYSIS OF TWINNING PROGRAM.=             CARLJP- -TIS
=                ANALYSIS OF VARIANCE AND COVARIANCE.              PR LLI- -AVC
  ED FO2 TWO TO THREE WAY ANALYSIS OF VARIANCE COV. ADJUST.=+H     MEIEP -04-GHF
   PROGRAM TO DEVELOP THE ANALYSIS OF VARIANCE FOR A REPLICATE     STERT -01-MPD
  ESIGN.=        BMD02V, ANALYSIS OF VARIANCE FOR FACTORIAL D      DIXOWJ-02-BVA
  TE CELL FREQU+THREE-WAY ANALYSIS OF VARIANCE FOR PROPORTIONA     OVERJE-01-TWA
  TE CELL FREQUEN+TWO-WAY ANALYSIS OF VARIANCE FOR PROPORTIONA     OVERJE-02-TWA
  DISPROPORTIONA+TWO-WAY ANALYSIS OF VARIANCE FOR UNEQUAL AND      OVERJE- -TWA
           G4 UCM MIX ANALYSIS OF VARIANCE NO 2.=                 MEIEP -04-GUM
           G4 UCM MIX ANALYSIS OF VARIANCE NO1.=                  MEIEP -02-GUM
  MPUTES +1MP005--ONE WAY ANALYSIS OF VARIANCE PROGRAM THAT CO     STERT - -MOW
        ANVA4--A 4-WAY ANALYSIS OF VARIANCE PROGRAM.=              SAKOJM- -AWA
        REANOVA--AN ANALYSIS OF VARIANCE PROGRAM.=                 VELDDJ- -RAV
  -NIH-NIH018G--A ONE WAY ANALYSIS OF VARIANCE PROGRAM.=     G4    DEPTHE-12-GNN
   PROGRAM TO COMPUTE AN ANALYSIS OF VARIANCE TABLE, FOR ONE       DIXOWJ- -BVM
  T REPLI+1MP009--A 3 WAY ANALYSIS OF VARIANCE WITH AND WITHOU     STERT - -MWA
  EASUR+A PROGRAM FOR THE ANALYSIS OF VARIANCE WITH REPEATED M     HARTDL- -PAV
```

```
N AND +   IMPC28--3 WAY ANALYSIS OF VARIANCE WITH REPLICATIO    STERT -01-MWA
       A PROGRAM FOR GENERAL ANALYSIS OF VARIANCE.=              DICKAW-  -PGA
            TCHS1-CNE-FACTOR ANALYSIS OF VARIANCE.=              FRAN  -  -TOF
                             ANALYSIS OF VARIANCE.=              MCKIRE-  -AV
                             ANALYSIS OF VARIANCE.=              MEDICO-  -AV
                    ONE-WAY ANALYSIS OF VARIANCE.=               OVERJE-  -OWA
              A PROGRAM FOR ANALYSIS OF VARIANCE.=               STOCFD-  -PAV
  LE FOR REPLICATED 2 WAY ANALYSIS OF VARIANCE.= + SUMMARY TAB   STERT -   -MPC
   FOR UNREPLICATED 2 WAY ANALYSIS OF VARIANCE.=+SUMMARY TABLE   STERT -   -MPD
ROGRAM FOR HIERARCHICAL ANALYSIS OF VARIANCE, HI-AOV.=   A P     PULLG -   -PHA
         AND CCRRELATION ANALYSIS ON THE DATA WITHIN SUBSAMPL    DIXOWJ-  -BRM
              PROBIT ANALYSIS PART I.=                           OGBORE-  -PAP
              PROBIT ANALYSIS PART II.=                          OGBORE-01-PAP
       A POWER SPECTRUM ANALYSIS PRGM.=                          MED CO-  -PSA
    AN N ORDINATE FOURIER ANALYSIS PRGM.=                        MEDICO-  -NOF
TIONAL INTEREST+AN ITEM ANALYSIS PROGRAM FOR THE STRONG VOCA     BENDAW-01-IAP
           ITEM ANALYSIS PROGRAM II.=                            BENDAW-  -IAP
  QUAP-4--QUESTIONNAIRE ANALYSIS PROGRAM 1.=                     WHITJR-  -QQA
            AN ITEM ANALYSIS PROGRAM.=                           BENDAW-C2-IAP
   A MULTIPLE REGRESSION ANALYSIS PROGRAM.=                      MEDICO-  -MRA
         AN EEG PERIOD ANALYSIS PROGRAM.=                        SHAPDM-  -EPA
         AN EEG PERIOD ANALYSIS PROGRAM.=                        SHAP  -  -EPA
    FACTSCOR--A FACTOR ANALYSIS PROGRAM.=                        VELDDJ-  -FFA
     FACTORX--A FACTOR ANALYSIS PROGRAM.=                        VELDDJ-01-FFA
-PARAMETRIC STATISTICAL ANALYSIS PROGRAM.=          A NON        DAMMRA-  -NPS
AL COMPONENT AND FACTOR ANALYSIS PROGRAM.=       A PRINCIP       STEIFE-  -PCF
TIOS FOR ELEVEN ELEMENT ANALYSIS PROGRAM.=   + AND MASS RA       OGBORE-  -MCM
TIPLE LINEAR REGRESSION ANALYSIS PROGRAM.=    LINEARV-A MUL      VELDDJ-  -LML
TAL MULTIPLE REGRESSION ANALYSIS PROGRAM, XRAP.=   EXPERIMEN     SHUMKE-  -EMR
M A + SAS, STATISTICAL ANALYSIS SYSTEM--A PROGRAM TO PERFOR      BRIDDA-  -SSA
SEQUENTIAL DEPENDENCIES ANALYSIS TO MEASURE REDUNDANCIES IN      BRAUML-  -SDA
N VARIABLE.=      ITEM ANALYSIS USING A CONTINUOUS CRITERIO      IKERHP-01-IAU
ON VARIABLE.=     ITEM ANALYSIS USING A DICHOTOMOUS CRITERI      IKERHP-  -IAU
A PRINCIPAL AXIS FACTOR ANALYSIS USING EITHER THE OBLIMAX        BRIDDA-  -SSA
         PROBIT ANALYSIS WITH CONFIDENCE LIMITS.=               MEDICO-  -PAC
            REGRESSION ANALYSIS.=                                BAILKK-  -RA
          TCHS 2 CLUSTER ANALYSIS.=                              FRAN  -  -TCA
    A MULTIPLE SCALOGRAM ANALYSIS.=                              LINGJC-  -MSA
      MULTIPLE SCALOGRAM ANALYSIS.=                              LINGJC-, -MSA
    F2 UCM FO2 CANONICAL ANALYSIS.=                              MEIEP -  -FUF
     F2-UCM-MIX FACTOR ANALYSIS.=                                MEIEP -  -FUM
   G2 HED FO2 CCRRELATION ANALYSIS.=                             MEIEP -06-GHF
    G2 UCM FO2 CUMPONENT ANALYSIS.=                              MEIEP -07-GUF
     MULTIPLE COVARIANCE ANALYSIS.=                              OVERJE-  -MCA
   PRINCIPAL AXES FACTOR ANALYSIS.=                              OVERJE-  -PAF
   POWERED VECTOR FACTOR ANALYSIS.=                              OVERJE-  -PVF
                  EEG ANALYSIS.=                                 RCA EL-  -EA
     SPECTRAL AND FOURIER ANALYSIS.=                             ROSEG -  -SFA
              CANONICAL ANALYSIS.=                               STEIFE-  -CA
   MULTIPLE REGRESSION ANALYSIS.=                                STEIFE-  -MRA
         PARTIAL ITEM ANALYSIS.=                                 WALKG -  -PIA
NTERBATTERY DIAD FACTOR ANALYSIS.=                 I            OVERJE-  -IDF
PROGRAM FOR SCCIOMETRIC ANALYSIS.=                 A            LINGJC-  -PSA
NERAL LINEAR COMPONENTS ANALYSIS.=                GE            OVERJE-  -GLC
```

14

```
O1T AMPLITUDE AND PHASE ANALYSIS.=                           BMD    DIXOWJ-   -BTA
RESSION AND CORRELATION ANALYSIS.=                           REG    PR LLI-   -RCA
OUP MULTIPLE REGRESSION ANALYSIS.=                         A GR     MEDICO-   -GMR
IPLE GROUP DISCRIMINANT ANALYSIS.=                         MULT     ROSEG -   -MGD
OGONAL POLYNOMIAL TREND ANALYSIS.=                         ORTH     OVERJE-   -OPT
GRAM FOR TRANSFORMATION ANALYSIS.=                        A PRO     KINGFJ-   -PTA
BIOLOGICAL ASSAY-PROBIT ANALYSIS.=                      BMD035,    DIXOWJ-   -BBA
  FOR SQUARE ROOT FACTOR ANALYSIS.=                    A PROGRAM    LINGJC-   -PSR
R TEST SCORING AND ITEM ANALYSIS.=                    A PROGRAM FO  BAKEFD-   -PTS
R PRINCIPAL AXIS FACTOR ANALYSIS.=                    A PROGRAM FO  BENDAW-   -PPA
  TIME SERIES COMPONENTS ANALYSIS.=                   A PROGRAM FOR SCHRND-   -PTS
  AND ELEMENTARY LINKAGE ANALYSIS.=               + APPROXIMATIONS  VELDDJ-   -CPP
ANCE AND POWER SPECTRAL ANALYSIS.=               BMD02T AUTOCOVARI  DIXOWJ-01-BTA
O AND CROSS CORRELATION ANALYSIS.=               TREND CORRECTED AUT OVERJE-  -TCA
ORRELATION AND SPECTRAL ANALYSIS.=               G2-HADF-ACSASM AUTOC DEPTHE- -GHA
RELATION AND REGRESSION ANALYSIS.=               MCORR--A MULTIPLE COR SAKOJM- -MMC
RESSION AND CORRELATION ANALYSIS.=               G2 UCM F02 MULTIPLE REG MEIEP -20-GUF
ATED PROGRAM FOR FACTOR ANALYSIS.=+MAPS A SYSTEM OF INTERREL       WEXLJD-   -MSI
ANCE MATRIX FOR PROFILE ANALYSIS.=NI                   + COVARI    DEPTHE-11-FNN
ICAL ANALYSIS OF PERIOD ANALYSIS).=              STATIS (STATIST    KIRK  -   -SSA
  SEQUENTIAL DEPENDENCY ANALYSIS--A PROGRAM FOR FACTORING          LINGJC-   -SDA
E +   BMD06M, CANONICAL ANALYSIS--A PROGRAM THAT COMPUTES TH       DIXOWJ-   -BMC
UT ACTIV+AIR BACKGROUND ANALYSIS--A PROGRAM TO COMPUTE FALLO       OGBORE-   -ABA
NEOUS +  ELEVEN ELEMENT ANALYSIS--A PROGRAM TO SOLVE SIMULTA       OGBORE-   -EEA
G1 UCM F02 DISCRIMINANT ANALYSIS--TWO GROUPS.=                     MEIEP -14-GUF
G1 UCM MIX DISCRIMINANT ANALYSIS-SEVERAL GROUPS.=                  MEIEP -06-GUM
REGRESSION AND HARMONIC ANALYSIS, A PROGRAM THAT FITS BY           DIXOWJ-   -BRP
 BMD03M, GENERAL FACTOR ANALYSIS, A PROGRAM THAT PERFORMS A        DIXOWJ-   -BMG
EA-NIH-NIH110--FOURIER ANALYSIS, A PROGRAM TO COMPUTE THE          DEPTHE-   -ENN
   PRINCIPAL COMPONENT ANALYSIS, PROGRAM THAT COMPUTES             DIXOWJ-   -BMP
     CONTINGENCY TABLE ANALYSIS, PROGRAM TO COMPUTE TWO-WAY        DIXOWJ-   -BSC
 PRINCIPAL AXIS FACTOR ANALYSIS, VARIMAX ROTATION AND FACTO        VELDDJ-   -API
S/LIFE-TAB-A PROGRAM TO ANALYZE DENTAL CARIES.=      VESUVIU       CARLJP-   -VLT
PERIMORT--A PROGRAM TO ANALYZE PERINATAL MORTALITY BY SELEC        CARLJP-   -PPA
   IN A SOLUTION AS ANALYZED BY THE SERIAL DILUTION               SULZES-   -PCC
A MATRIX OF COSINES OF ANGLES BETWEEN ALL COMBINATIONS OF          VELDDJ-   -MPC
TERATOMIC DISTANCES AND ANGLES'.=              ICR NO 13-14 'IN    PATTAL-   -INI
                        ANOVA 23.=                                 VELDDJ-   -A
RAL HYPOTHESIS NO 2 FOR ANOVA.=              G4 UCM F02 GENE        MEIEP -05-GUF
L LINEAR HYPOTHESIS FOR ANOVA.=              G4 UCM F02 GENERA      MEIEP -04-GUF
ES IN CENTRAL TENDENCI+ ANOVA--A PROGRAM TO DETECT DIFFERENC       VELDDJ-01-APD
    THAT ATTEMPTS TO ANSWER THE QUESTION 'WHAT ARE THE             VELDDJ-   -CPT
UOROMETRIC TITRATION OF ANTIBODIES.=                        FL     EISEH -   -FTA
PROGRAM.=              ANVA4--A 4-WAY ANALYSIS OF VARIANCE         SAKOJM-   -AWA
ALYSIS OF VARIANCE, HI- AOV.=  A PROGRAM FOR HIERARCHICAL AN       PULLG -   -PHA
VERAGING TECHNIQUES IN+ APPLICATION OF PHASE DETECTION AND A       ADEYWR-   -APD
   LEAST SQUARES APPROXIMATION WITH FLOATING POINT.=              PR LLI-   -LSA
      TETRACHORIC APPROXIMATIONS AND ELEMENTARY LINKAG            VELDDJ-   -CPP
COMPUTE ORDINATE AND/OR AREA OF TWO CLOSELY RELATED PROBABIL       DEPTHE-07-GNN
THE ABSCISSA FROM THE AREA OR DERIVATIVE OF TWO CLOSELY            DEPTHE-08-GNN
  SIGMA TEST FOR THREE AREAS AND NTAPES--A PROGRAM WHICH           OGBORE-   -TST
ACTOR AND SUMS SELECTED AREAS.=  + 400-CHANNEL OUTPUT BY A F       OGBORE-   -CCP
THE ANALYSIS OF CARDIAC ARRHYTHMIA UTILIZING THE SETAR MARK        BLACCR-   -ACA
  3-CARD DESCRIPTOR OF ARTICLE TO PREPARE BIBLIOGRAPHY            OGBORE-   -IRT
```

```
A HUMAN GROWTH HORMONE ASSAY PROGRAM.=                          BECKP -  -HGH
        BMD035, BIOLOGICAL ASSAY-PROBIT ANALYSIS.=              DIXOWJ-  -BBA
N SCALE NO 2 SCORES ARE ASSIGNED.=+THE FINAL STEPS OF GUTTMA    DIXOWJ-04-BSG
SITION OF A SET WITH AN ASSOCIATED LINEAR GRAPH.=   + DECOMPO   CHRIA -  -HPH
      VARIOUS STATISTICS ASSOCIATED WITH PAIRED VARIABLES OF    DEPTHE-14-GNN
ES THE COEFFICIENTS FOR ASYMMETRICAL PAIRED DATA GROUPINGS.=    STERT -  -MCC
PERTZ, ETC).+G2-UCM-F02 ASYMPTOTIC REGRESSION (LOGISTIC, COM    MEIEP -17-GUF
PERTZ, ETC).=   BMD06R, ASYMPTOTIC REGRESSION (LOGISTIC, GOM    DIXOWJ-  -BRA
T+CANON--A PROGRAM THAT ATTEMPTS TO ANSWER THE QUESTION 'WHA    VELDDJ-  -CPT
OF MULTIPLE TIME SERIE+ AUTO AND CROSS CORRELATION ANALYSIS     OVERJE-  -ACC
=        TREND CORRECTED AUTO AND CROSS CORRELATION ANALYSIS.   OVERJE-  -TCA
                    AN AUTO AND CROSS CORRELATION PROGRAM.=     BENDAW-  -ACC
          KSL 2.15 K-5 AUTO CORRELATION.=                       DICKKW-  -KKA
S.=      G2-HADF-ACSASM AUTOCORRELATION AND SPECTRAL ANALYSI    DEPTHE-  -GHA
ALYSIS.=        BMD02T AUTOCOVARIANCE AND POWER SPECTRAL AN     DIXOWJ-01-BTA
 FLUCTUATIONS IN REPEA+ AUTOCROS--A PROGRAM TO DETECT CYCLIC    VELDDJ-  -APD
TMENT PLANNING.=      AN AUTOMATION PROGRAM OF RADIATION TREA    STERTD-  -APR
 A PROGRAM TO CALCULATE AVERAGE RIDITS.=                        HOFFEP-  -PCA
      TO COMPUTE SIMPLE AVERAGES AND MEASURES OF DISPERSION     DIXOWJ-  -BDS
           COEFFICIENTS, AVERAGES AND MEASURES OF DISPERSION.   DIXOWJ-  -BDC
HE METHOD OF RECIPROCAL AVERAGES.=          + INVENTORIES BY T  BAKEFB-  -PSP
OF PHASE DETECTION AND AVERAGING TECHNIQUES IN COMPUTER         ADEYWR-  -APD
          PRINCIPAL AXES FACTOR ANALYSIS.=                      OVERJE-  -PAF
      (B) PRINCIPAL AXIS FACTOR ANALYSIS (C) ORTHOGONAL         VELDDJ-  -FPP
TO PERFORM A PRINCIPAL AXIS FACTOR ANALYSIS USING EITHER        BRIDDA-  -SSA
A PROGRAM FOR PRINCIPAL AXIS FACTOR ANALYSIS.=                  BENDAW-  -PPA
           PRINCIPAL AXIS FACTOR ANALYSIS, VARIMAX ROTATI       VELDDJ-  -API
MPUTE FALLOUT ACTIV+AIR BACKGROUND ANALYSIS--A PROGRAM TO CO    OGBORE-  -ABA
CH SUBTRACTS EXPERIMENT BACKGROUND FROM 400 CHANNEL OUTPUT.=    OGBORE-  -BSP
 SUBTRACTS EXPERIMENT + BACKGROUND SUBTRACT--A PROGRAM WHICH    OGBORE-  -BSP
PAIRED COMPARISONS FROM BALANCED INCOMPLETE BLOCKS.=  + FOR     GULLH -  -BPP
HER TWO OR +    IMPO2Q-- BARTLETT TEST-A PROGRAM TO TEST WHET   STERT -  -MQB
ARIANCES.=              BARTLETT'S TEST FOR HOMOGENEITY OF V     MCMACA-  -BST
 FROM BALANCED INCOMP+A BASIC PROGRAM FOR PAIRED COMPARISONS    GULLH -  -BPP
    FREQUENCY TABLES AND BASIC STATISTICS ON DATA STORED IN     MERRHH-  -CTP
GNOSTIC CLASSIFICATION+ BAYESIAN CONDITIONAL PROBABILITY DIA    OVERJE-  -BCP
A +   A PROGRAM TO FIND BEST FITTING ORTHOGONAL FACTORS FOR     SAUNDR-  -PFB
 OF ARTICLE TO PREPARE BIBLIOGRAPHY WITH 1 TO 6 REQUIREMENT     OGBORE-  -IRT
SE REGRESSION (MODIFIED BIMD 34).=         + GENERALIZED STEPWI MEIEP -07-GUM
SE REGRESSION (MODIFIED BIMD 34).=  + MIX GENERALIZED STEPWI    MEIEP -11-GUM
1).=       000077-E2-UOC BIN NONLINEAR ESTIMATION (BSCC VERS    MEIEP -01-EUB
ETRIC METHOD).=   E2 UCC BIN NONLINEAR ESTIMATION (VARIABLE M   MEIEP -  -EUB
D).=        GU-UOC- BIN SURVIVAL TABLES (ACTUARIAL METHO        MEIEP -  -GUB
   ANALYSIS OF QUANTAL BIOASSAY WITH A SINGLE TREATMENT.=       SULZES-  -PAQ
IONS AND SUMMARY STATI+ BIODENT-A PROGRAM TO PRODUCE TABULAT    CARLJP-  -BPP
         BMD035, BIOLOGICAL ASSAY-PROBIT ANALYSIS.=            DIXOWJ-  -BBA
A PROGRAM THAT COMPUTES BISERIAL CORRELATION COEFFICIENTS       STERT -01-MPT
        BISERIAL POINT- BISERIAL CORRELATION PROGRAM.=          CAST  -  -BPB
PROGRAM.=              BISERIAL POINT-BISERIAL CORRELATION      CAST  -  -BPB
FFICIENTS FOR DISCRETE, BISTABLE (YES OR NO) DATA.=    + COE    STERT -01-MPT
HADM-N                 BIVARIATE INTERPOLATION, A PROGRAM       DEPTHE-01-EHN
HADM-T                 BIVARIATE INTERPOLATION, A PROGRAM       DEPTHE-01-EHT
CNG VOCATIONAL INTEREST BLANK.=+ANALYSIS PROGRAM FOR THE STR    BENDAW-01-IAP
ROM BALANCED INCOMPLETE BLOCKS.=  + FOR PAIRED COMPARISONS F    GULLH -  -BPP
```

ISOTOPE METHOD).=	BLOOD VOLUME ANALYSIS (SIMULTANEOUS	LANGS - -BVA
RAM TO COMPUTE SIMPLE +	BMD01D, SIMPLE DATA DESCRIPTION PROG	DIXOWJ- -BDS
, PROGRAM THAT COMPUTE+	BMD01M, PRINCIPAL COMPONENT ANALYSIS	DIXOWJ- -BMP
PROGRAM THAT PROVIDES +	BMD01R, SIMPLE LINEAR REGRESSION, A	DIXOWJ- -BRS
PROGRAM.=	BMD01S, LIFE TABLE AND SURVIVAL RATE	DIXOWJ- -BSL
=	BMD01T AMPLITUDE AND PHASE ANALYSIS.	DIXOWJ- -BTA
TION)--A PROGRAM TO +	BMD02D (CORRELATION WITH TRANSGENERA	DIXOWJ- -BDC
ONENTS, A PROGRAM TO +	BMD02M, REGRESSION ON PRINCIPAL COMP	DIXOWJ- -BMR
AM TO COMPUTE A SEQUEN+	BMD02R, STEPWISE REGRESSION, A PROGR	DIXOWJ-01-BRS
PROGRAM TO COMPUTE +	BMD02S, CONTINGENCY TABLE ANALYSIS,	DIXOWJ- -BSC
TRAL ANALYSIS.=	BMD02T AUTOCOVARIANCE AND POWER SPEC	DIXOWJ-01-BTA
TURIAL DESIGN.=	BMD02V, ANALYSIS OF VARIANCE FOR FAC	DIXOWJ-02-BVA
CN) A PROGRAM TO COMPU+	BMD03D (CORRELATION WITH ITEM DELETI	DIXOWJ-01-BDC
ROGRAM THAT PERFORMS A+	BMD03M, GENERAL FACTOR ANALYSIS, A P	DIXOWJ- -BMG
E COMBINATIONS, A PROG+	BMD03R, MULTIPLE REGRESSION WITH CAS	DIXOWJ- -BRM
ACTORIAL DESIGN.=	BMD03V, ANALYSIS OF COVARIANCE FOR F	DIXOWJ- -BVA
YSIS.=	BMD035, BIOLOGICAL ASSAY-PROBIT ANAL	DIXOWJ- -BBA
O GROUPS, A PROGRAM +.	BMD04M, DISCRIMINANT ANALYSIS FOR TW	DIXOWJ- -BMD
ONIC ANALYSIS, A PROGR+	BMD04R, PERIODIC REGRESSION AND HARM	DIXOWJ- -BRP
PROGRAM THAT PERFORMS+	BMD04S, GUTTMAN SCALE PREPROCESSOR A	DIXOWJ- -BSG
MULTIPLE COVARIATES.=	BMD04V, ANALYSIS OF COVARIANCE WITH	DIXOWJ-01-BVA
GRAM.=	BMD05D, GENERAL PLOT INCLUDING HISTO	DIXOWJ- -BDG
VERAL GROUPS A PROGRAM+	BMD05M, DISCRIMINANT ANALYSIS FOR SE	DIXOWJ-01-BMD
	BMD05R, POLYNOMIAL REGRESSION. =	DIXOWJ-01-BRP
THAT ASSIGNS PROPER +	BMD05S GUTTMAN SCALE NO 1 A PROGRAM	DIXOWJ-01-BSG
	BMD05V GENERAL LINEAR HYPOTHESIS.=	DIXOWJ- -BVG
GRAM TO SEPARATE CASES+	BMD06D, DESCRIPTION OF STRATA--A PRO	DIXOWJ-03-BDD
M THAT COMPUTES THE +.	BMD06M, CANONICAL ANALYSIS--A PROGRA	DIXOWJ- -BMC
TIC, GOMPERTZ, ETC).=	BMD06R, ASYMPTOTIC REGRESSION (LOGIS	DIXOWJ- -BRA
MS THE INITIAL STEPS OF	BMD06S AND BMD07S.= + THAT PERFOR	DIXOWJ- -BSG
ROGRAM THAT PERFORMS +	BMD06S GUTTMAN SCALE NO 2 PART 1 A P	DIXOWJ-02-BSG
H CONTRASTS.=	BMD06V GENERAL LINEAR HYPOTHESIS WIT	DIXOWJ-01-BVG
ISTOGRAMS--A PROGRAM +	BMD07D, DESCRIPTION OF STRATA WITH H	DIXOWJ-02-BDD
PROGRAM THAT PERFORMS+	BMD07S GUTTMAN SCALE NO 2 PART 2 THE	DIXOWJ-03-BSG
IAL STEPS OF BMD06S AND	BMD07S.= + THAT PERFORMS THE INIT	DIXOWJ- -BSG
RAM TO COMPUTE AN ANAL+	BMD07V, MULTIPLE RANGE TESTS--A PROG	DIXOWJ- -BVM
LE STACKING--A PROGRAM+	BMD08D, CROSS TABULATION WITH VARIAB	DIXOWJ-03-BDC
PROGRAM THAT PERFORMS+	BMD08S GUTTMAN SCALE NO 2 PART 3 THE	DIXOWJ-04-BSG
DATA--A PROGRAM TO +	BMD09D, CROSS TABULATION, INCOMPLETE	DIXOWJ-02-BDC
S--A PROGRAM TO FIND +	BMD10D, DATA PATTERNS FOR DICHOTOMIE	DIXOWJ- -BDD
IES, A PROGRAM THAT +.	BMD11D, DATA PATTERNS FOR POLYCHOTOM	DIXOWJ-01-BDD
FUNCTIONS ACCORDING TO	BRAGG'S LAW FOR THE ANALYSIS OF	PARNBL+ -TFA
ZO	BSC AC PEDIATRIC CORRELATION PH 1.=	MEIEP - -ZBA
NONLINEAR ESTIMATION (	BSCC VERS 1).= E2 UOC F02	MEIEP - -EUF
NONLINEAR ESTIMATION (	BSCC VERS 1).= 000077-E2-UOC BIN	MEIEP -01-EUB
A, A PROGRAM THAT WILL	CALCULATE AND PRINT A MATRIX OF	DICKKW- -KAS
A PROGRAM TO	CALCULATE AVERAGE RIDITS.=	HOFFEP- -PCA
A COMPUTER PROGRAM TO	CALCULATE CC PETER'S INDEX OF CURVIL	VANDSG- -CPC
D-STATISTIC PROGRAM TO	CALCULATE INTERDESCRIPTION INDICES.=	DICKKW- -KDS
COR70-- A PROGRAM TO	CALCULATE PRODUCT MOMENT CORRELATION	SAKOJM- -CPC
T DISTRIBU+A PROGRAM TO	CALCULATE THE ORDINATE OF STUDENT'S	SULZES-01-PCO
UARED DIST+A PROGRAM TO	CALCULATE THE ORDINATE OF THE CHI-SQ	SULZES- -PCO
F TEST GIVEN THE F +	CALCULATION OF P-VALUES FOR FISHER'S	SULZES- -CPV
SWER THE QUESTION 'WHA+	CANON--A PROGRAM THAT ATTEMPTS TO AN	VELDDJ- -CPT

```
            F2 UCM F02 CANONICAL ANALYSIS.=                           MEIEP -   -FUF
                       CANONICAL ANALYSIS.=                           STEIFE-   -CA
  CMPUTES THE +    BMD06M, CANONICAL ANALYSIS--A PROGRAM THAT C        DIXOWJ-   -BMC
                 A CANONICAL CORRELATION PRGM.=                       SHUMKE-   -CCP
     GO HED FC2 MAXIMUM CANONICAL CORRELATION.=                       MEIEP -01-GHF
     THAT COMPUTES THE CANONICAL CORRELATIONS BETWEEN TWO             DIXOWJ-   -BMC
MPUTE +G2-NIH-NIHO1OG A CANONICAL CORRELATIONS PROGRAM TO CO          DEPTHE-17-GNN
            GO HED F02 CANONICAL CORRELATIONS.=                       MEIEP -   -GHF
   PROGRAM SEARCHES 3- CARD DESCRIPTOR OF ARTICLE TO PREPAR           OGBORE-   -IRT
   DEVIATIONS FROM SINGLE CARD.=        + FOR MEANS AND STANDARD      OGBORE-   -PMS
  AR MARK+THE ANALYSIS OF CARDIAC ARRHYTHMIA UTILIZING THE SET        BLACCR-   -ACA
  STORED IN ANY FORMAT ON CARDS OR TAPE.=+ STATISTICS ON DATA         MERRHH-   -CTP
  OGRAM TO ANALYZE DENTAL CARIES.=          VESUVIUS/LIFE-TAB-A PR    CARLJP-   -VLT
  DEL+A PROGRAM FOR MONTE CARLO TRIALS ON A LINEAR LEARNING MO        CAMPDP-   -PMC
     AND RANK ORDERS EACH CASE BY THE SIZE OF EACH PRINCIPAL          DIXOWJ-   -BMR
      EACH STANDARDIZED CASE BY THE SIZE OF EACH PRINCIPAL            DIXOWJ-   -BMP
        REGRESSION WITH CASE COMBINATIONS, A PROGRAM THAT             DIXOWJ-   -BRM
     AND ITEM NUMBERS OR CASE NUMBERS TO IDENTIFY CASES HAVIN         DIXOWJ-01-BDD
  AN SCALE SCORE FOR EACH CASE.=+THE CASES AND ASSIGNS A GUTTM        DIXOWJ-01-BSG
   ON VARIABLES RANKS THE CASES AND ASSIGNS A GUTTMAN SCALE           DIXOWJ-01-BSG
ASE NUMBERS TC IDENTIFY CASES HAVING THESE DATA PATTERNS.=+C          DIXOWJ-01-BDD
   PROGRAM TC SEPARATE CASES INTO SPECIFIED INTERVALS OF             DIXOWJ-03-BDD
WHICH PREPARES LISTS OF CASES MEETING SPECIFIED RESTRICTIONS          MASSFJ-   -XLP
 NUMBER AND PERCENTS OF CASES OF A VARIABLE FALLING INTO 3            MASSFJ-   -XHL
FROM VARIABLE NUMBER OF CASES.=+COMPUTE A STANDARD SPECTRUM           OGBORE-   -POF
S OF EEG RECORDS IN THE CAT.=+TECHNIQUES IN COMPUTER ANALYSI          ADEYWR-   -APD
  THAT COMPUTES CORR + Z CCOR A ZERO CELL CORRELATION ROUTINE         SAKOJM-   -ZCZ
ES CORR + Z CCOR A ZERO CELL CORRELATION ROUTINE THAT COMPUT          SAKOJM-   -ZCZ
AL AND DISPROPORTIONATE CELL FREQUENCIES.=            + FOR UNEQU     OVERJE-   -TWA
IANCE FOR PROPORTIONATE CELL FREQUENCIES.= + ANALYSIS OF VAR          OVERJE-01-TWA
IANCE FOR PROPORTIONATE CELL FREQUENCIES.= + ANALYSIS OF VAR          OVERJE-02-TWA
            RED CELL VOLUME.=                                         OGBORE-   -RCV
THE FREQUENCIES IN THE CELLS COMING FROM DIFFERENT POPULATI          STERT -   -MFS
OF OBSERVATIONS IN THE CELLS.=+SYSTEM HAVING UNEQUAL NUMBER          STERT -01-MPD
ION TABLES FOR RAW-SCO+ CENTILE-A PROGRAM TO PROVIDE CONVERS          VELDDJ-01-CPP
 DETECT DIFFERENCES IN CENTRAL TENDENCIES AMONG A SET OF             VELDDJ-01-APD
NT OR FACTOR+G1 HED F02 CENTROIDS, DISPERSIONS IN DISCRIMINA          MEIEP -02-GHF
MPUTE HALF-LIFE OF EACH CHANNEL OF A SPECTRUM.=         + TO CO       OGBORE-   -PTP
 WHICH MULTIPLIES 400- CHANNEL OUTPUT BY A FACTOR AND SUMS           OGBORE-   -CCP
ENT BACKGROUND FROM 400 CHANNEL OUTPUT.= + SUBTRACTS EXPERIM          OGBORE-   -BSP
    VARIABLE NUMBER OF CHANNELS BY A COMMON FACTOR.=                 OGBORE-   -FMM
ECESSIVE PROPORTIONS OF CHARACTERISTICS.=    + TO ESTIMATE R          CARLJP-   -RPE
ATIONAL AND DEMOGRAPHIC CHARACTERISTICS.= + BY SELECTED GEST          CARLJP-   -PPA
PROGRAM TO PLCT KINDRED CHARTS FOR THE EXPLORATION OF FAMILI          FRAN  -   -TPP
PLUS OR MINUS 2 SIGMA ( CHAUVENET TEST).=   + SAMPLE AGAINST          OGBORE-   -TST
         PROGRAM WHICH CHECKS THE LINEARITY OF REGRESSION            LEVOE -   -SRP
        TO GENERATE A CHI-SQUARE DEVIATE WITH R DEGREES              DEPTHE-04-GNN
TE INDIVIDUAL AND TOTAL CHI-SQUARE DISTRIBUTIONS.=+ TO COMPU          DEPTHE-05-GNN
BLES.=       KSL 2.61-- CHI-SQUARE FOR A SET OF FREQUENCY TA          DICKKW-   -KCS
           KSL 2.60-- CHI-SQUARE FOR DICHOTOMOUS DATA.=              DICKKW-02-KCS
S, CORREC+A PROGRAM FOR CHI-SQUARE FOR 2X2 CONTINGENCY TABLE          DAS RS-   -PCS
PROGRAM TO CCMPUTE THE CHI-SQUARE OF THE SHIFT IN RESPONSE           DEPTHE-10-GNN
           G1-UCM CHI-SQUARE PROGRAM.=                               BRUNRE-   -GUC
          A CHI-SQUARE PROGRAM.=                                     GALLAB-   -CSP
```

T-TEST, F-TEST, CHI-SQUARE TEST.=	OGBORE-	-TTF
CHI-SQUARE TEST.=	PR LLI-	-CST
F QUALITATIVE DATA WITH CHI-SQUARE TESTS.= + ANALYSIS O	OVERJE-	-FAQ
TO COMPUTE ALL 2X2 CHI-SQUARE VALUES OF A MATRIX OF	FRAN -	-TPC
-BY-TWO TABLES.= CHI-SQUARE WITH YATES CORRECTION TWO	MCMACA-	-CSY
G1-UCM-F02--GENERAL CHI-SQUARE.=	MEIEP -	-GUF
CM AND THE VALUE OF THE CHI-SQUARE.= + OF DEGREES OF FREED	SULZES-	-PCO
STANDARD DEVIATIONS AND CHI-SQUARE.= + COMPUTE FREQUENCIES,	MASSFJ-01-XTW	
LATION (WITH CR WITHOUT CHI-SQUARE).= CROSS-TABU	ROSEG -	-CTU
THE ORDINATE OF THE CHI-SQUARED DISTRIBUTION GIVEN THE	SULZES-	-PCO
TEST OR THE CLASSICAL CHI-SQUARED TEST ON A FOUR FOLDTABLE	SULZES-	-PFS
DIFFER SIGNIFICANTLY (CHI-SQUARED).=+TWO OR MORE VARIANCES	STERT -	-MQB
FUNCTION SCORES, CHI-SQUARES REGARDING GROUP MEMBERSH	VELDDJ-	-GPP
AND PERCENTAGE TABLES, CHI-SQUARES, CONTINGENCY COEFFICIENT	DIXOWJ-	-BSC
TION PROGRAM USING UNIT CLASS INTERVALS.= + COUNT DISTRIBU	SAKOJM-	-CFC
VARIABLE FALLING INTO 3 CLASSES.= + PERCENTS OF CASES OF A	MASSFJ-	-XHL
OF FISHER'S TEST OR THE CLASSICAL CHI-SQUARED TEST ON A	SULZES-	-PFS
M.= A GENERAL CROSS CLASSIFICATION AND TABULATING PROGRA	BONARR-	-GCC
XCLAS-A GENERA CROSS CLASSIFICATION PROGRAM WHICH CROSS-	SAKOJM-	-XGC
IMIZATION PROCEDURE AND CLASSIFICATION PROGRAM.= + OPT	LINGJC-	-TOP
XTAB61, A CROSS CLASSIFICATION TABLES PROGRAM.=	MASSFJ-01-XCC	
SINGLE VARIABLE OF CLASSIFICATION.=	MCMACA-	-SVC
PROFILE CORRELATION CLASSIFICATION.=	OVERJE-	-PCC
IDIAN DISTANCE FUNCTION CLASSIFICATION.= EUCL	OVERJE-	-EDF
PROBABILITY DIAGNOSTIC CLASSIFICATION.= + CONDITIONAL	OVERJE-	-BCP
CT MULTIVARIATE PROFILE CLASSIFICATION.= + VECTOR PRODU	OVERJE-	-NVP
XIMIZING PREDICTION AND CLASSIFICATION.= A PROGRAM FOR MA	LINGJC-	-PMP
S.= TWO VARIABLES OF CLASSIFICATION, REPEATED MEASUREMENT	MCMACA-01-TVC	
TWO VARIABLES OF CLASSIFICATION, SINGLE OBSERVATION.=	MCMACA-	-TVC
FOR ONE VARIABLE OF CLASSIFICATION, WITH UNEQUAL GROUP	DIXOWJ-	-BVM
PROGRAM WHICH CROSS- CLASSIFIES GIVEN VARIABLES BY OTHER	SAKOJM-	-XGC
FOR THE PURPOSE OF CLASSIFYING AN INDIVIDUAL INTO ONE	DIXOWJ-01-BMD	
BY FINDING CLEAR PEAK RATIOS AND STRIPPING	OGBORE-01-MDS	
TCHS 2 CLUSTER ANALYSIS.=	FRAN -	-TCA
LINKAGE A CLUSTERINE PROGRAM.=	VELDDJ-	-LCP
MPLE SUBJECT TO NATURAL CLUSTERING INTRACLASS CORRELATION.=	HOPKCG-	-VMS
NE PARTICULAR SPECIFIED CODE IN INPUT DATA.= + OF ANY O	DIXOWJ-	-BDD
UTING.= GCODE-GENERAL CODING AND FREQUENCY DISTRIBUTION RO	SAKOJM-	-GGC
TINE THAT COMPUTES CORR COEFF.=+ A ZERO CELL CORRELATION ROU	SAKOJM-	-ZCZ
PAIRWISE PEARSON-R CORR COEFF.=+ PROGRAM WHICH COMPUTES ALL	NICHHC-	-IPW
THE REGRESSION COEFFICIENT AND CORRELATION COEFFICI	OGBORE-	-ELR
--A PROGRAM WHIC+MATRIX COEFFICIENT AND MASS RATIO GENERATOR	OGBORE-	-MCM
XTAB 81, A CORRELATION COEFFICIENT PROGRAM (SIMPLE AND	MASSFJ-	-XCC
FICIENT AND CORRELATION COEFFICIENT.= + THE REGRESSION COEF	OGBORE-	-ELR
WHICH PREPARES MATRIX COEFFICIENTS AND MASS RATIOS FOR	OGBORE-	-MCM
CONTINGENCY COEFFICIENTS AND MAX LIKELIHOOD	DIXOWJ-	-BSC
THAT COMPUTES THE COEFFICIENTS FOR ASYMMETRICAL PAIRED	STERT -	-MCC
BISERIAL CORRELATION COEFFICIENTS FOR DISCRETE, BISTABLE	STERT -01-MPT	
HC+1MP002 A CORRELATION COEFFICIENTS PROGRAM THAT COMPUTES T	STERT -	-MCC
KSL 2.40, DICHOTOMOUS COEFFICIENTS.=	DICKKW-	-KDC
TCHS 4 CORRELATION COEFFICIENTS.=	FRAN -	-TCC
DUCT MOMENT CORRELATION COEFFICIENTS.= + TO CALCULATE PRO	SAKOJM-	-CPC
IED PARTIAL CORRELATION COEFFICIENTS.= + TO COMPUTE SPECIF	FRAN -01-TPC	
TE MULTIPLE CORRELATION COEFFICIENTS.= + A PROGRAM TO COMPU	VELDDJ-	-RPC

19

```
        FREQUENCY FUNCTION COMPUTATIONS.=                            ROSEMA-   -FFC
S + MATCH--A PROGRAM TO COMPUTE A MATRIX OF COSINES OF ANGLE         VELDDJ-   -MPC
             A PROGRAM TO COMPUTE A SEQUENCE OF MULTIPLE LINEA       DIXOWJ-01-BRS
   GROUPS A PROGRAM TO COMPUTE A SET OF LINEAR FUNCTIONS             DIXOWJ-01-BMD
DELETION) A PROGRAM TO COMPUTE A SIMPLE CORRELATION MATRIX,          DIXOWJ-01-BDC
CORRECTED--A PROGRAM TO COMPUTE A STANDARD SPECTRUM FROM             OGBORE-   -POF
A+TCHS 5--A PROGRAM TO COMPUTE ALL 2X2 CHI-SQUARE VALUES OF          FRAN  -   -TPC
   TESTS--A PROGRAM TO COMPUTE AN ANALYSIS OF VARIANCE               DIXOWJ-   -BVM
             PROGRAM TO COMPUTE AND PRINT MEANS, STANDARD            DEPTHE-19-GNN
ANALYSIS--A PROGRAM TO COMPUTE FALLOUT ACTIVITY IN AN AIR            OGBORE-   -ABA
           A PROGRAM TO COMPUTE FOUR SQUARE DETERMINANTS.=           SULZES-   -PCF
UTION, +   A PROGRAM TO COMPUTE FREQUENCIES, PERCENT DISTRIB         YERUJ -   -PCF
TABLES LI--A PROGRAM TO COMPUTE FREQUENCIES, STANDARD DEVIAT         MASSFJ-01-XTW
 A PROGRAM DESIGNED TO COMPUTE FREQUENCY TABLES AND BASIC            MERRHH-   -CTP
PHASE TWO--A PROGRAM TO COMPUTE HALF-LIFE OF EACH CHANNEL            OGBORE-   -PTP
             PROGRAM TO COMPUTE INDIVIDUAL AND TOTAL CHI-SQU         DEPTHE-05-GNN
   REGRES A PROGRAM TO COMPUTE MULTIPLE CORRELATION COEFFIC          VELDDJ-   -RPC
           A PROGRAM TO COMPUTE NEW VARIABLES FOR CORRELATIO         DEPTHE-20-GNN
             PROGRAM TO COMPUTE ORDINATE AND/OR AREA OF TWO          DEPTHE-07-GNN
 DESCRIPTION PROGRAM TO COMPUTE SIMPLE AVERAGES AND MEASURES         DIXOWJ-   -BDS
             PROGRAM TO COMPUTE SIMPLE CORRELATION COEFFICIE         DIXOWJ-   -BDC
 OF ONE VARIABLE AND COMPUTE SIMPLE STATISTICAL MEASURES            DIXOWJ-03-BDD
N +TCHS 7--A PROGRAM TO COMPUTE SPECIFIED PARTIAL CORRELATIO         FRAN  -01-TPC
2+1MP008--A PROGRAM TO COMPUTE SUMMARY TABLE FOR REPLICATED          STERT -   -MPC
            PROGRAM TO COMPUTE THE ABSCISSA FROM THE AREA            DEPTHE-08-GNN
            PROGRAM TO COMPUTE THE CHI-SQUARE OF THE SHIFT           DEPTHE-10-GNN
ARTICLES + A PROGRAM TO COMPUTE THE CONCENTRATION OF SMALL P         SULZES-   -PCC
           A PROGRAM TO COMPUTE THE EIGENVECTORS FROM THE            DEPTHE-05-FNN
CORRELATIONS PROGRAM TO COMPUTE THE MAXIMUM CORRELATIONS             DEPTHE-17-GNN
             PROGRAM TO COMPUTE THE MAXIMUM LIKELIHOOD SOLUT         DEPTHE-13-GNN
ION+1MP001-A PROGRAM TO COMPUTE THE MEAN AND STANDARD DEVIAT         STERT -01-MPC
           A PROGRAM TO COMPUTE THE PRINCIPAL COMPONENTS OF          DIXOWJ-   -BMR
ANALYSIS, A PROGRAM TO COMPUTE THE VALUES OF THE FOURIER             DEPTHE-   -ENN
 ANALYSIS, PROGRAM TO COMPUTE TWO-WAY FREQUENCY AND PERCEN           DIXOWJ-   -BSC
STACKING--A PROGRAM TO COMPUTE TWO-WAY FREQUENCY TABLES OF           DIXOWJ-03-BDC
           A PROGRAM TO COMPUTE VARIOUS STATISTICS ASSOCIATE         DEPTHE-14-GNN
AVERAGING TECHNIQUES IN COMPUTER ANALYSIS OF EEG RECORDS IN          ADEYWR-   -APD
DATA.=                  COMPUTER ANALYSIS OF SPECTROGRAPHIC          WILKT -   -CAS
 RAW SCORES TO T-SCOR+A COMPUTER PROGRAM FOR CONVERTING MMPI         LADDCE-   -CPC
EIN STRUC+COMPROTEIN--A COMPUTER PROGRAM TO AID PRIMARY PROT         DAYHMO-   -CCP
ER'S INDEX OF CURVILI+A COMPUTER PROGRAM TO CALCULATE CC PET         VANDSG-   -CPC
           TIME--A COMPUTER PROGRAM TO DETERMINE ACTIVI              OGBORE-   -SAV
        MENU PLANNING BY COMPUTER.=                                  BALIJL-   -MPC
CARDIOGRAM BY A DIGITAL COMPUTER.=         ANALYSIS OF A PHONO       HOFLJJ-   -APD
R MARK III AND IBM 1620 COMPUTER.=        + UTILIZING THE SETA       BLACCR-   -ACA
ROCARDIOGRAMS.=  USE OF COMPUTERS IN INTERPRETATION OF ELECT         PIPBHV-   -UCI
 GROUPS, A PROGRAM THAT COMPUTES A LINEAR FUNCTION OF P              DIXOWJ-   -BMD
 DISPOSITION RECORD -- COMPUTES ACTIVITY OF SAMPLE, PRODUCE          OGBORE-   -RCI
        PROGRAM WHICH COMPUTES ALL PAIRWISE PEARSON-R                NICHHC-   -IPW
 1MP024 A PROGRAM THAT COMPUTES BISERIAL CORRELATION COEFFI          STERT -01-MPT
ORRELATION ROUTINE THAT COMPUTES CORR COEFF.=+ A ZERO CELL C         SAKOJM-   -ZCZ
 FORM G, A PROGRAM THAT COMPUTES JOINT AGREEMENT PATTERNS.=          DICKKW-   -KAP
NTAPES--A PROGRAM WHICH COMPUTES MEAN, STANDARD DEVIATION,           OGBORE-   -TST
 VARIANCE PROGRAM THAT COMPUTES MEANS, STD. ERROR, VARIANCE          STERT -   -MOW
```

```
PLE AND MULT+XTAB 81, A CORRELATION COEFFICIENT PROGRAM (SIM      MASSFJ-   -XCC
RESSION COEFFICIENT AND CORRELATION COEFFICIENT.=  + THE REG      OGBORE-   -ELR
  THAT COMPUTES BISERIAL CORRELATION COEFFICIENTS FOR DISCRET     STERT -01-MPT
T COMPUTES THE+1MP002 A CORRELATION COEFFICIENTS PROGRAM THA      STERT -   -MCC
            TCHS 4 CORRELATION COEFFICIENTS.=                     FRAN  -   -TCC
ALCULATE PRODUCT MOMENT CORRELATION COEFFICIENTS.=    + TO C      SAKOJM-   -CPC
MPUTE SPECIFIED PARTIAL CORRELATION COEFFICIENTS.=    + TO CO     FRAN  -01-TPC
RAM TC COMPUTE MULTIPLE CORRELATION COEFFICIENTS.=   + A PROG     VELDDJ-   -RPC
WHICH COMPUTES MULTIPLE CORRELATION COEFFICIENTS.=+ PROGRAM       NICHHC-   -MCP
     TO COMPUTE SIMPLE CORRELATION COEFFICIENTS, AVERAGES         DIXOWJ-   -BDC
MPUTE NEW VARIABLES FOR CORRELATION INPUT.=+ A PROGRAM TO CO      DEPTHE-20-GNN
     AND NONSYMMETRIC CORRELATION MATRICES OF DATA WITH           DAS RS-   -UPP
     PRODUCT MOMENT CORRELATION MATRICES.=                        OVERJE-   -PMC
D VARIMAX ROTATION ON A CORRELATION MATRIX.=   + ANALYSIS AN      DEPTHE-   -GNN
VIATIONS AND THE INTER- CORRELATION MATRIX.=   + STANDARD DE      DEPTHE-19-GNN
S A GIVEN COVARIANCE OR CORRELATION MATRIX.=+OF LOADINGS FIT      DEPTHE-02-GNN
   TO COMPUTE A SIMPLE CORRELATION MATRIX, OMITTING UNDESIR       DIXOWJ-01-BDC
    ZO BSC AC PEDIATRIC CORRELATION PH 1.=                        MEIEP -   -ZBA
        A CANONICAL CORRELATION PRGM.=                            SHUMKE-   -CCP
S MISSING CWCM.=      A CORRELATION PROGRAM WITH OBSERVATION      VANDJM-   -CPO
     AN AUTO AND CROSS CORRELATION PROGRAM.=                      BENDAW-   -ACC
   A SINGLE DIGIT SCORE CORRELATION PROGRAM.=                     BENDAW-   -SDS
BISERIAL POINT-BISERIAL CORRELATION PROGRAM.=                     CAST  -   -BPB
        A GENERAL CORRELATION PROGRAM.=                           CRAMEN-   -GCP
   G2-NIH-NIH008G A CORRELATION PROGRAM.=                         DEPTHE-16-GNN
          A CORRELATION PROGRAM.=                                 MCMACA-   -CP
  LINEAR REGRESSION AND CORRELATION PROGRAM.=                     NICHHC-   -LRC
            CORRELATION PROGRAM.=                                 OGBORE-   -CP
NIH001G A PRE-POST EDIT CORRELATION PROGRAM.=       G1-NIH-       DEPTHE-15-GNN
 COMPUTES MULT+MULTIPLE CORRELATION PROGRAM, A PROGRAM WHICH      NICHHC-   -MCP
         TWO CORRELATION PROGRAMS.=                               IKERPH-   -TCP
6, UN-17 PRODUCT MOMENT CORRELATION PROGRAMS.= + UN-15, UN-1      SCHAKW-   -UUU
     A PROGRAM FOR CORRELATION RATIOS.=                           LINGJC-   -PCR
RR + Z CCOR A ZERO CELL CORRELATION ROUTINE THAT COMPUTES CO      SAKOJM-   -ZCZ
OGRAM TO COMPU+BMD03D ( CORRELATION WITH ITEM DELETION) A PR      DIXOWJ-01-BDC
 PROGRAM TO +  BMD02D ( CORRELATION WITH TRANSGENERATION)--A      DIXOWJ-   -BDC
    KSL 2.15 K-5 AUTO CORRELATION.=                               DICKKW-   -KKA
D F02 MAXIMUM CANONICAL CORRELATION.=            GO HE            MEIEP -01-GHF
RAM FCR THE TETRACHORIC CORRELATION.=            A PROG           CHARM -   -PTC
L CLUSTERING INTRACLASS CORRELATION.=    + SUBJECT TO NATURA      HOPKCG-   -VMS
 TO COMPUTE THE MAXIMUM CORRELATIONS BETWEEN ALL LINEAR           DEPTHE-17-GNN
 COMPUTES THE CANONICAL CORRELATIONS BETWEEN TWO SETS OF          DIXOWJ-   -BMC
     A CANONICAL CORRELATIONS PROGRAM TO COMPUTE THE              DEPTHE-17-GNN
   GO HED F02 CANONICAL CORRELATIONS.=                            MEIEP -   -GHF
30-HIGHER ORDER PARTIAL CORRELATIONS.=              KSL 2.        DICKKW-   -KHO
OF DIFFERENCES BETWEEN CORRELATIONS.=+TEST THE SIGNIFICANCE       DICKKW-   -KFS
OVARIANC+KSL 2.05, K-9- CORRELATIONS, MEANS, STANDARD DEV, C      DICKKW-   -KKC
   K-8-PRODUCT-MOMENT CORRELATIONS, VARIANCE- COVARIANCES         DICKKW-   -KKP
 FRECUENCY ANALYSIS OF CORRELOGRAM FUNCTIONS.=                    OVERJE-   -FAC
ESSENTIAL DIMENSIONS OF CORRESPONDENCE AMONG TWO SETS OF          VELDDJ-   -CPT
IBUTICN AND DISPOSAL OF CORTISOL IN HUMANS.=      THE DISTR       NUGECA-   -DDC
CT MOMENT CORRELATION + COR70-- A PROGRAM TO CALCULATE PRODU      SAKOJM-   -CPC
 COFIT, A LEAST SQUARES COSINE FITTING PROGRAM.=                  ANDEBL-   -CLS
 TO COMPUTE A MATRIX OF COSINES OF ANGLES BETWEEN ALL COMBIN      VELDDJ-   -MPC
```

23

```
T +    COUNT-A FREQUENCY COUNT DISTRIBUTION PROGRAM USING UNI    SAKOJM-   -CFC
               EXPECTED COUNT RATE.=                             OGBORE-   -ECR
  PROGRAM USING UNIT +   COUNT-A FREQUENCY COUNT DISTRIBUTION    SAKOJM-   -CFC
       PROGRAM 2 TO GIVE COUNTS OF INDIVIDUALS WHO MEET SPECI    MASSFJ-01-XST
 AY ANALYSIS OF VARIANCE COV. ADJUST.=+HED FO2 TWO TO THREE W    MEIEP -04-GHF
              MULTIPLE COVARIANCE ANALYSIS.=                     OVERJE-   -MCA
 HED FO2 TEST H**2, WITH COVARIANCE CONTROLS.=            GO     MEIEP -05-GHF
    BMD03V, ANALYSIS OF COVARIANCE FOR FACTORIAL DESIGN.=        DIXOWJ-   -BVA
 F1-NIH-NIH002F--WITHIN COVARIANCE MATRIX FOR PROFILE ANALYS     DEPTHE-11-FNN
 F LOADINGS FITS A GIVEN COVARIANCE OR CORRELATION MATRIX.=+0    DEPTHE-02-GNN
 1MP018--AN ANALYSIS OF COVARIANCE PROGRAM FOR A MULTIGROUP      STERT -   -MAC
          AN ANALYSIS OF COVARIANCE PROGRAM.=                   U OFOF-   -ACP
 =    BMD04V, ANALYSIS OF COVARIANCE WITH MULTIPLE COVARIATES.   DIXOWJ-01-BVA
  G4 UCM MIX ANALYSIS OF COVARIANCE.=                           MEIEP -03-GUM
  G4 UCM FOR ANALYSIS OF COVARIANCE.=                           MEIEP -11-GUA
 NALYSIS OF VARIANCE AND COVARIANCE.=                      A    PR LLI-   -AVC
 PLE ONE-WAY ANALYSIS OF COVARIANCE.=                    SIM    OVERJE-   -SOW
    WITH SPECIFIED MEANS, COVARIANCES AND SERIAL TREND.=        DICKKW-01-KCS
    MEANS, STANDARD DEV, COVARIANCES IN LOGARITHMIC SCALE.=     DICKKW-   -KKC
 CORRELATIONS, VARIANCE- COVARIANCES MEANS AND STD DEVIATIONS   DICKKW-   -KKP
 OVARIANCE WITH MULTIPLE COVARIATES.=   BMD04V, ANALYSIS OF C   DIXOWJ-01-BVA
    INDIVIDUAL SPECTRA TO CREATE A THEORETICAL COMPOSITE SPECT  OGBORE-   -SAP
 SITION RECORD + REACTOR CREATED ISOTOPE PRODUCTION AND DISPO   OGBORE-   -RCI
 CN-LINEAR REGRESSION BY CRITERION OF LEAST SQUARES.=      N    BEJAGG-   -NLR
 GRAM TO YIELD PREDICTED CRITERION SCORES.=    REGSCOR--A PRO   VELDDJ-   -RPY
 YSIS USING A CONTINUOUS CRITERION VARIABLE.=      ITEM ANAL    IKERHP-01-IAU
 SIS USING A DICHOTOMOUS CRITERION VARIABLE.=      ITEM ANALY   IKERHP-   -IAU
   THE OBLIMAX CR VERIMAX CRITERION.=  + ANALYSIS USING EITHER  BRIDDA-   -SSA
 PROGRAM.=     A GENERAL CROSS CLASSIFICATION AND TABULATING    BONARR-   -GCC
 ROSS- +  XCLAS-A GENERA CROSS CLASSIFICATION PROGRAM WHICH C   SAKOJM-   -XGC
 =         XTAB61, A CROSS CLASSIFICATION TABLES PROGRAM.        MASSFJ-01-XCC
 LE TIME SERIES+AUTO AND CROSS CORRELATION ANALYSIS OF MULTIP   OVERJE-   -ACC
 REND CORRECTED AUTO AND CROSS CORRELATION ANALYSIS.=      T    OVERJE-   -TCA
           AN AUTO AND CROSS CORRELATION PROGRAM.=              BENDAW-   -ACC
 PUTE FREQUENCY TABLES + CROSS TAB, A PROGRAM DESIGNED TO COM   MERRHH-   -CTP
            G1 UCM FO2 CROSS TABULATION NO 1.=                  MEIEP -24-GUF
            G1 UCM FO2 CROSS TABULATION NO 2.=                  MEIEP -22-GUF
 =         G1 UCM FO2 CROSS TABULATION NO 3 (MODIFIED 23).      MEIEP -21-GUF
 ING--A PROGRAM +BMD08D, CROSS TABULATION WITH VARIABLE STACK   DIXOWJ-03-BDC
  PROGRAM TO +   BMD09D, CROSS TABULATION, INCOMPLETE DATA--A   DIXOWJ-02-BDC
    PROGRAM TO PERFORM CROSS TABULATIONS OF INPUT DATA          DIXOWJ-02-BDC
         PROGRAM WHICH CROSS- CLASSIFIES GIVEN VARIABLES        SAKOJM-   -XGC
 I-SQUARE).=             CROSS-TABULATION (WITH OR WITHOUT CH    ROSEG -   -CTO
         AND THREEWAY CROSSTABULATIONS OF FREQUENCIES AND       DEPTHE-28-GNN
        FACTORS FOR A CRYSTAL GROUND AS AN ALLIPSOID OF         PATTAL-   -INA
 ATES'.+LCR NO 2 'SINGLE CRYSTAL ORIENTER (GENIOSTAT) COORDIN   PATTAL-01-INS
 LAW FOR THE ANALYSIS OF CRYSTAL STRUCTURES.=    + TO BRAGG'S   PARNBL-   -TFA
    SET OF PROGRAMS FOR CURVE AND SURFACE FITTING ON UNEQUAL    HOBBC -   -ISP
  A DOUBLE EXPONENTIAL CURVE FIT BY MAXIMUM LIKELIHOOD.=        MEDICO-   -DEC
        AN EXPONENTIAL CURVE FIT BY MAXIMUM LIKELIHOOD.=        MEDICO-   -ECF
 E LAGRANGIAN POLYNOMIAL CURVE FIT PROGRAM.=    + SECOND DEGRE  DEPTHE-   -EHT
 EXFIT, AN EXPONENTIAL CURVE FITTING PROGRAM.=                  ANDEBL-   -EEC
                      CURVE FITTING PROGRAMS.=                  NICHHC-   -CFP
                      CURVE FITTING.=                           EIMERA-   -CF
```

24

```
, EXPONENTIAL AND POWER  CURVE FITTING.=+LEAST SQUARES LINEAR       OVERJE-   -LSL
A PROGRAM FOR SELECTIVE  CURVE SET.=                                WALKJR-   -PSC
AM TO FIT AN EXPONENTAL  CURVE.=                          A PROGR   GILLPA-   -PFE
OF THE DOSAGE RESPONSE   CURVE.=+ MAXIMUM LIKELIHOOD SOLUTION       DEPTHE-13-GNN
             GROWTH      CURVES.=                                   KRONLH-   -GC
ATE CC PETER'S INDEX OF  CURVILINEARITY.= + PROGRAM TO CALCUL       VANDSG-   -CIPC
TH OBSERVATIONS MISSING  CWOM.=            A CORRELATION PROGRAM WI  VANDJM-   -CPO
     PROGRAM TO DETECT   CYCLIC FLUCTUATIONS IN REPEATED            VELDDJ-   -APD
ERDESCRIPTL+KSL 2.70--A  D-STATISTIC PROGRAM TO CALCULATE INT       DICKKW-   -KDS
PATTERNS OF ONE-COLUMN   DATA AND ITEM NUMBERS OR CASE NUMBER       DIXOWJ-01-BDD
OF STANDARDIZED          DATA AND RANK ORDERS EACH CASE BY          DIXOWJ-   -BMR
OF STANDARDIZED          DATA AND RANK ORDERS EACH STANDARDIZ       DIXOWJ-   -BMP
SIMPLE + BMD01D, SIMPLE  DATA DESCRIPTION PROGRAM TO COMPUTE        DIXOWJ-   -BDS
TABULATIONS OF INPUT     DATA EXCLUDING SPECIFIED SPECIAL           DIXOWJ-02-BDC
FOR ASYMMETRICAL PAIRED  DATA GROUPINGS.= + THE COEFFICIENTS        STERT -   -MCC
WAY FREQUENCY TABLES OF  DATA INPUT.=+PROGRAM TO COMPUTE TWO-       DIXOWJ-03-BDC
PROGRAM TO GROUP         DATA INTO SPECIFIED NUMBER OF GROUPS       DIXOWJ-02-BDD
PROPER WEIGHT TO GIVEN   DATA ON VARIABLES RANKS THE CASES          DIXOWJ-01-BSG
GRAM TO FIND +  BMD10D,  DATA PATTERNS FOR DICHOTOMIES--A PRO       DIXOWJ-   -BDD
ROGRAM THAT +   BMD11D,  DATA PATTERNS FOR POLYCHOTOMIES, A P       DIXOWJ-01-BDD
TIFY CASES HAVING THESE  DATA PATTERNS.=+CASE NUMBERS TO IDEN       DIXOWJ-01-BDD
G1 UCM FO2               DATA PATTERNS-DICROTOMY.=                  MEIEP -23-GUF
G1 UCM FO2               DATA PATTERNS-POLYCHOTOMY.=                MEIEP -26-GUF
AN EEG DIGITAL           DATA PREPARATION PROGRAM.=                 BRIDDA-   -EDD
.=        ICR NO 11 '    DATA REDUCTION FOR THE GE GENIOSTAT'       PATTAL-   -IND
ICR NO 12 'WEISSENBERG   DATA REDUCTION ROUTINE'.=                  PATTAL-   -INW
PROGRAM FOR STATISTICAL  DATA REDUCTION.=    G1-HEDP-CORANL-A       DEPTHE-   -GHC
INPUT +G1-NIH-NIH005G-   DATA SCREENING A PROGRAM TO TEST RAW       DEPTHE-29-GNN
G1 UCM MIX               DATA SCREENING NO 1.=                      MEIEP -13-GUM
G1 UCM MIX               DATA SCREENING NO 2.=                      MEIEP -14-GUM
G1 UCM               DATA SCREENING NO 3.=                          MEIEP -   -GUD
G1 UCM MIX               DATA SCREENING NO 4.=                      MEIEP -12-GUM
AND BASIC STATISTICS ON  DATA STORED IN ANY FORMAT ON CARDS         MERRHH-   -CTP
ICR NO 6 'FOURIER        DATA TAPE MAKER'.=                         PATTAL-   -INF
TO TEST RAW INPUT        DATA TO FIND THE FORM OF THEIR DISTR       DEPTHE-29-GNN
FROM PULSE TESTING       DATA USING FILON'S FORMULA FOR NUMER       CLEMWC-01-CFR
FROM PULSE TESTING       DATA USING THE TRAPEZOIDAL RULE FOR        CLEMWC-   -CFR
ANALYSIS OF QUALITATIVE  DATA WITH CHI-SQUARE TESTS.=              OVERJE-   -FAQ
CORRELATION MATRICES OF  DATA WITH MISSING VALUES.=                 DAS RS-   -UPP
ANALYSIS ON THE          DATA WITHIN SUBSAMPLES OF POPULATION       DIXOWJ-   -BRM
LYSIS OF SPECTROGRAPHIC  DATA.=                      COMPUTER ANA    WILKT -   -CAS
-SQUARE FOR DICHOTOMOUS  DATA.=               KSL 2.60--CHI         DICKKW-02-KCS
NONLINEAR OR NONMETRIC   DATA.=         + PROGRAM FOR FACTORING     LINGJC-   -SDA
SPECIFIED CODE IN INPUT  DATA.=         + OF ANY ONE PARTICULAR     DIXOWJ-   -BDD
E, BISTABLE (YES OR NO)  DATA.=         + COEFFICIENTS FOR DISCRET  STERT -01-MPT
OM DENTAL EPIDEMIOLOGIC  DATA.=        + AND SUMMARY STATISTICS FR  CARLJP-   -BPP
REPLICATION AND MISSING  DATA.=        + ANALYSIS OF VARIANCE WITH  STERT -01-MWA
E ORDER OF ENTRY OF THE  DATA.=+ NUMBER OF GROUPS BASED ON TH       DIXOWJ-02-BDD
ON OF PSYCHOPHYSIOLOGIC  DATA.=+FOR A REGRESSION TRANSFORMATI       WILLBJ-   -PRT
TABULATION, INCOMPLETE   DATA--A PROGRAM TO PERFORM CROSS           DIXOWJ-02-BDC
FOR THE HIERARCHICAL     DECOMPOSITION OF A SET WITH AN ASSOC       CHRIA -   -HPH
THREE POINT SECOND       DEGREE LAGRANGIAN POLYNOMIAL CURVE         DEPTHE-   -EHT
GIVEN THE NUMBER OF      DEGREES OF FREEDOM AND THE VALUE OF        SULZES-01-PCO
GIVEN THE NUMBER OF      DEGREES OF FREEDOM AND THE VALUE OF        SULZES-   -PCO
```

25

```
THE F STATISTIC AND THE  DEGREES OF FREEDOM.= + F TEST GIVEN       SULZES-  -CPV
I-SQUARE DEVIATE WITH R  DEGREES OF FREEDOM.= + GENERATE A CH      DEPTHE-04-GNN
   (CORRELATION WITH ITEM DELETION) A PROGRAM TO COMPUTE A         DIXOWJ-01-BDC
ELECTED GESTATIONAL AND  DEMOGRAPHIC CHARACTERISTICS.= + BY S      CARLJP-  -PPA
             SPECTRAL    DENSITY ANALYSIS OF TIME SERIES.=         OVERJE-  -SDA
UP OF THE F PROBABILITY  DENSITY FUNCTION.=    + A TABLE LOOK      DEPTHE-06-GNN
         A POWER SPECTRAL DENSITY.=                                FINKM -  -PSD
AB-A PROGRAM TO ANALYZE  DENTAL CARIES.=     VESUVIUS/LIFE-T       CARLJP-  -VLT
SUMMARY STATISTICS FROM  DENTAL EPIDEMIOLOGIC DATA.=   + AND       CARLJP-  -BPP
UNDANCIES IN+SEQUENTIAL  DEPENDENCIES ANALYSIS TO MEASURE RED      BRAUML-  -SDA
 ANALYSIS OF SEQUENTIAL  DEPENDENCIES.=      + FOR INFORMATION     MCKIJ -  -PIA
ACTORING +   SEQUENTIAL  DEPENDENCY ANALYSIS--A PROGRAM FOR F      LINGJC-  -SDA
 RELATIONSHIP BETWEEN A  DEPENDENT VARIABLE AND ONE OR MORE        DIXOWJ-  -BRS
S IN ORDER TO PREDICT A  DEPENDENT VARIABLE.=      + VARIABLE      DEPTHE-23-GNN
NT VARIABLES TO PREDICT  DEPENDENT VARIABLE.=  + OF INDEPENDE      DEPTHE-22-GNN
T GROUPS ON A SERIES OF  DEPENDENT VARIABLES.=+ SET OF SUBJEC      VELDDJ-01-APD
       FROM THE AREA OR  DERIVATIVE OF TWO CLOSELY RELATED         DEPTHE-08-GNN
S--A PROGRAM TO+BMD07D,  DESCRIPTION OF STRATA WITH HISTOGRAM      DIXOWJ-02-BDD
SEPARATE CASES +BMD06D,  DESCRIPTION OF STRATA--A PROGRAM TO       DIXOWJ-03-BDD
E + BMD01D, SIMPLE DATA  DESCRIPTION PROGRAM TO COMPUTE SIMPL      DIXOWJ-  -BDS
PROGRAM SEARCHES 3-CARD  DESCRIPTOR OF ARTICLE TO PREPARE          OGBORE-  -IRT
ERIME+A PROGRAM FOR THE  DESIGN OF OPTIMUM MULTIFACTORIAL EXP      SMITWN-  -PDO
 VARIANCE FOR FACTORIAL  DESIGN.=        BMD02V, ANALYSIS OF       DIXOWJ-02-BVA
OVARIANCE FOR FACTORIAL  DESIGN.=        BMD03V, ANALYSIS OF C     DIXOWJ-  -BVA
   CROSS TAB, A PROGRAM  DESIGNED TO COMPUTE FREQUENCY TABLES      MERRHH-  -CTP
NALYSIS OF EXPERIMENTAL  DESIGNS BY MEANS OF RANDOMIZATION.=       BAKEFB-  -AED
       AND DISPOSED WITH DETAIL AND/OR CONSOLIDATED INFORMATI      OGBORE-  -RCI
 AUTOCROS--A PROGRAM TO  DETECT CYCLIC FLUCTUATIONS IN REPEAT      VELDDJ-  -APD
  ANOVA--A PROGRAM TO    DETECT DIFFERENCES IN CENTRAL TENDEN      VELDDJ-01-APD
N +APPLICATION OF PHASE  DETECTION AND AVERAGING TECHNIQUES I      ADEYWR-  -APD
PROGRAM TO EVALUATE THE  DETERMINANT OF A NEARLY TRIANGULAR        DEPTHE-08-FNN
`A PROGRAM TO EVALUATE   DETERMINANTS OF REAL AND COMPLEX          DEPTHE-01-FHN
 TO COMPUTE FOUR SQUARE  DETERMINANTS.=            A PROGRAM       SULZES-  -PCF
M TO SOLVE COMPOSI+MASS  DETERMINATION BY STRIPPING--A PROGRA      OGBORE-01-MDS
ED VERSION.=       MASS  DETERMINATION BY STRIPPING, SIMPLIFI      OGBORE-  -MDS
IOACTIVE ISOTOPES+ISAN-  DETERMINATION OF THE PRESENCE OF RAD      CARLJP-  -IDP
IMARY PROTEIN STRUCTURE  DETERMINATION.=  + PROGRAM TO AID PR      DAYHMO-  -CCP
HORMONE PRODUCTION RATE  DETERMINATIONS.=      + METHODS FOR       NUGECA-  -IDM
    COMPUTER PROGRAM TO  DETERMINE ACTIVITY OF NEURON IRRADIA      OGBORE-  -SAV
EQUATION--A PROGRAM TO   DETERMINE EXCESS REACTIVITY WHEN          OGBORE-  -HEP
 ACTIVITY--THE PROGRAM   DETERMINES EITHER SATURATION, SPECIF      OGBORE-  -SSA
         MEANS, STANDARD DEV, COVARIANCES IN LOGARITHMIC           DICKKW-  -KKC
R +1MP006--A PROGRAM TO  DEVELOP AND PRINT A SUMMARY TABLE FO      STERT -  -MPD
A+1MP027--A PROGRAM TO   DEVELOP THE ANALYSIS OF VARIANCE FOR      STERT -01-MPD
O GENERATE A CHI-SQUARE  DEVIATE WITH R DEGREES OF FREEDOM.=       DEPTHE-04-GNN
   THE MEAN AND STANDARD DEVIATION OF SEVERAL VARIABLES AND        STERT -01-MPC
GHTED MEAN AND STANDARD  DEVIATION.=          GO-UOC-F02, WEI      MEIEP -01-GUF
GHTED MEAN AND STANDARD  DEVIATION.=          GO-UOC-F02, WEI      MEIEP -13-GUF
COMPUTES MEAN, STANDARD  DEVIATION, AND COMPARES EACH SAMPLE       OGBORE-  -TST
ROUTINE (MEAN, STANDARD  DEVIATION, T-TEST).=     STATISTICAL      OGBORE-  -SRM
E FREQUENCIES, STANDARD  DEVIATIONS AND CHI-SQUARE.= + COMPUT      MASSFJ-01-XTW
  PRINT MEANS, STANDARD  DEVIATIONS AND THE INTER-CORRELATION      DEPTHE-19-GNN
FOR MEANS AND STANDARD   DEVIATIONS FROM SINGLE CARD.=            OGBORE-  -PMS
VARIANCES MEANS AND STD  DEVIATIONS.=            + VARIANCE- CO    DICKKW-  -KKP
```

```
UPING ANALYSIS BASED ON DISTANCES IN TEST SPACE.=        + GRO   VELDDJ-    -GPW
UTION STATISTICS.=        DISTAT, A PROGRAM TO COMPILE DISTRIB   OGBORE-    -DPC
L IN HUMANS.=        THE DISTRIBUTION AND DISPOSAL OF CORTISO    NUGECA-    -DDC
  LOCATED AND DISPERSED DISTRIBUTION FROM ANY SET OF RAW-SCO     VELDDJ-    -SPO
      OF THE CHI-SQUARED DISTRIBUTION GIVEN THE NUMBER OF        SULZES-    -PCO
ORDINATE OF STUDENT'S T DISTRIBUTION GIVEN THE NUMBER OF         SULZES-01-PCO
           RADIATION DISTRIBUTION OF IMPLANTS.=                  POWEWE-    -RDI
COUNT-A FREQUENCY COUNT DISTRIBUTION PROGRAM USING UNIT          SAKOJM-    -CFC
    1MP003-A FREQUENCY DISTRIBUTION PROGRAM.=                    STERT -    -MFD
AL CODING AND FREQUENCY DISTRIBUTION ROUTINE.=    GCODE-GENER    SAKOJM-    -GGC
T, A PROGRAM TO COMPILE DISTRIBUTION STATISTICS.=        DISTA   OGBORE-    -DPC
 SAMPLES FROM A NORMAL DISTRIBUTION WITH SPECIFIED MEANS,        DICKKW-01-KCS
 PROGRAM FOR FISHER'S F DISTRIBUTION.=                     A     HOLLC -    -PFS
VARIANCE IS UNKNOWN, T- DISTRIBUTION.=        + MEAN WHEN THE    MCMACA-    -CSM
OM ANY SET OF RAW-SCORE DISTRIBUTION.=       + DISTRIBUTION FR   VELDDJ-    -SPO
 FIND THE FORM OF THEIR DISTRIBUTION, FREQUENCIES AND RANGES     DEPTHE-29-GNN
   FREQUENCIES, PERCENT DISTRIBUTION, RATES AND MEANS.=          YERUJ -    -PCF
ROGRAM TO GET FREQUENCY DISTRIBUTIONS AND STATISTICS.= + A P     VELDDJ-    -CPG
   KSL 4.00-FREQUENCY DISTRIBUTIONS.=                            DICKKW-    -KFD
AL AND TOTAL CHI-SQUARE DISTRIBUTIONS.=+ TO COMPUTE INDIVIDU     DEPTHE-05-GNN
CN TABLES FOR RAW-SCORE DISTRIBUTIONS.=+ TO PROVIDE CONVERSI     VELDDJ-01-CPP
CONCERNING THE SHAPE OF DISTRIBUTIONS.=+PROVIDE INFORMATION      VELDDJ-    -DPP
ELIHOOD SOLUTION OF THE DOSAGE RESPONSE CURVE.=+ MAXIMUM LIK     DEPTHE-13-GNN
MUM LIKELIHOOD.=     A DOUBLE EXPONENTIAL CURVE FIT BY MAXI      MEDICO-    -DEC
2 UCM PROBIT ANALYSIS ( DUMMY).=                           G     MEIEP -    -GUP
ROGRAM TO COMPUTE THE + EA-NIH-NIH110--FOURIER ANALYSIS, A P     DEPTHE-    -ENN
-NIH-NIH001G A PRE-POST EDIT CORRELATION PROGRAM.=        G1     DEPTHE-15-GNN
                    EEG ANALYSIS.=                              RCA EL-    -EA
.=              AN EEG DIGITAL DATA PREPARATION PROGRAM          BRIDDA-    -EDD
              AN EEG PERIOD ANALYSIS PROGRAM.=                  SHAP  -    -EPA
              AN EEG PERIOD ANALYSIS PROGRAM.=                  SHAPDM-    -EPA
IN COMPUTER ANALYSIS OF EEG RECORDS IN THE CAT.=+TECHNIQUES      ADEYWR-    -APD
MMETERIC +   F2 HED FO2 EIGENVALUES AND VECTORS OF A REAL SY     MEIEP -    -FHF
ENVECTORS FROM THE REAL EIGENVALUES OF A MATRIX.=  + THE EIG     DEPTHE-05-FNN
PLICATIO+F2-NIH-NIH003F EIGENVALUES-VECTORS AND MATRIX MULTI     DEPTHE-04-FNN
RIC MATRI+F2-NIH-NIH008 EIGENVALUES-VECTORS OF A REAL SYMMET     DEPTHE-06-FNN
MATRIX.=  F2-NIH-NIH010 EIGENVALUES-VECTORS OF NONSYMMETRIC      DEPTHE-07-FNN
ETRIC MATRIX+F2 HED FO2 EIGENVECTORS AND VALUES OF A NONSYMM     MEIEP -01-FHF
 PROGRAM TO COMPUTE THE EIGENVECTORS FROM THE REAL EIGENVALU     DEPTHE-05-FNN
RS IN INTERPRETATION OF ELECTROCARDIOGRAMS.=  USE OF COMPUTE     PIPBHV-    -UCI
              ELECTROPHORETIC PATTERN.=                         OGBORE-    -EP
 MASS RATIOS FOR ELEVEN ELEMENT ANALYSIS PROGRAM.=       + AND   OGBORE-    -MCM
 SIMULTANEOUS +   ELEVEN ELEMENT ANALYSIS--A PROGRAM TO SOLVE    OGBORE-    -EEA
R TOTAL OF ACTIVITY PER ELEMENT.=     + PROGRAM PREPARES YEA     OGBORE-    -SSR
    APPROXIMATIONS AND ELEMENTARY LINKAGE ANALYSIS.=            VELDDJ-    -CPP
EAR EQUATIONS OF ELEVEN ELEMENTS IN A COMPOSITE.=       + LIN    OGBORE-    -EEA
AK RATIOS AND STRIPPING ELEMENTS OFF COMPOSITE.= + CLEAR PE      OGBORE-01-MDS
 AND MASS RATIOS FOR ELEVEN ELEMENT ANALYSIS PROGRAM.=          OGBORE-    -MCM
O SOLVE SIMULTANEOUS + ELEVEN ELEMENT ANALYSIS--A PROGRAM T      OGBORE-    -EEA
   LINEAR EQUATIONS OF ELEVEN ELEMENTS IN A COMPOSITE.=         OGBORE-    -EEA
S BASED ON THE ORDER OF ENTRY OF THE DATA.=+ NUMBER OF GROUP     DIXOWJ-02-BDD
 STATISTICS FROM DENTAL EPIDEMIOLOGIC DATA.=    + AND SUMMARY    CARLJP-    -BPP
EARITY OF REGRESSION BY EPSILON.=     + WHICH CHECKS THE LIN     LEVOE -    -SRP
ES AT A GIVEN NUMBER OF EQUALLY SPACED POINTS.=+FOURIER SERI     DEPTHE-    -ENN
```

28

```
INTERPOLATICN, A PROG+  E1-HADM-NBBIVA--LAGRANGIAN BIVARIATE      DEPTHE-01-EHN
   DEGREE LAGRANGIAN +   E1-HADM-TEAARD--A THREE POINT SECOND      DEPTHE-  -EHT
INTERPOLATICN, A PROG+   E1-HADM-TEDUBL--LAGRANGIAN BIVARIATE      DEPTHE-01-EHT
IABLE METRIC METHOD).=   E2 UCC BIN NONLINEAR ESTIMATION (VAR      MEIEP - -EUB
C VERS 1).=              E2 UOC FO2 NONLINEAR ESTIMATION (8SC      MEIEP - -EUF
IABLE METRIC METHOD).=   E2 UOC FO2 NONLINEAR ESTIMATION (VAR      MEIEP -01-EUF
CMIAL FIT.=              E2-HADF-POLFDTP--LEAST SQUARES POLYN      DEPTHE- -EHP
ES PROGRAM.=             E2-NIH-NIH122--NONLINEAR LEAST SQUAR      DEPTHE-01-ENN
C VERS 1).=    000077-   E2-UOC BIN NONLINEAR ESTIMATION (BSC      MEIEP -01-EUB
   A PRCGRAM FOR FISHER'S F DISTRIBUTION.=                         HOLLC -  -PFS
   A TABLE LOOKUP OF THE F PROBABILITY DENSITY FUNCTION.=          DEPTHE-06-GNN
        F TEST GIVEN THE F STATISTIC AND THE DEGREES OF FREED      SULZES-  -CPV
  P-VALUES FOR FISHER'S F TEST GIVEN THE F STATISTIC AND THE       SULZES-  -CPV
N GROUPS, COMPARES WITH F-TEST.=+ VARIANCE BETWEEN AND WITHI       STERT -  -MOW
          T-TEST, F-TEST, CHI-SQUARE TEST.=                        OGBORE-  -TTF
  AGREEMENT SCORES, FORM F, A PROGRAM WHICH WILL PRINT ONLY        DICKKW-  -KRA
RS FRCM TWO INDEPENDENT FACTOR ANALYSES.=  + OF FACTOR-VECTO       VELDDJ-  -MPC
    (B) PRINCIPAL AXIS FACTOR ANALYSIS (C) ORTHOGONAL VARIM        VELDDJ-  -FPP
METHOD).+G2-NIH-NIH020G FACTOR ANALYSIS (MAXIMUM LIKELIHOOD        DEPTHE-01-GNN
                        FACTOR ANALYSIS (REAL OR COMPLEX).=        ROSEG -  -FAR
LYSIS ITEM ANALYSIS AND FACTOR ANALYSIS AND ROTATION.=, + ANA      WOLFR -  -TPT
  A PRINCIPLE COMPONENT FACTOR ANALYSIS AND VARIMAX ROTATION       DEPTHE-  -GNN
CARRY OUT A TRANSPOSED FACTOR ANALYSIS OF PERSONS, RATHER          VELDDJ-  -TPC
        TCHS1-ONE- FACTOR ANALYSIS OF VARIANCE.=                   FRAN  -  -TOF
       FACTSCOR--A FACTOR ANALYSIS PROGRAM.=                       VELDDJ-  -FFA
        FACTORX--A FACTOR ANALYSIS PROGRAM.=                       VELDDJ-01-FFA
PRINCIPAL COMPONENT AND FACTOR ANALYSIS PROGRAM.=        A         STEIFE-  -PCF
    A PRINCIPAL AXIS FACTOR ANALYSIS USING EITHER THE              BRIDDA-  -SSA
        F2-UCM-MIX FACTOR ANALYSIS.=                               MEIEP -  -FUM
    INTERBATTERY DIAD FACTOR ANALYSIS.=                            OVERJE-  -IDF
        PRINCIPAL AXES FACTOR ANALYSIS.=                           OVERJE-  -PAF
        POWERED VECTOR FACTOR ANALYSIS.=                           OVERJE-  -PVF
PROGRAM FOR SQUARE ROOT FACTOR ANALYSIS.=              A           LINGJC-  -PSR
GRAM FOR PRINCIPAL AXIS FACTOR ANALYSIS.=          A PRO           BENDAW-  -PPA
NTERRELATED PROGRAM FOR FACTOR ANALYSIS.=+MAPS A SYSTEM OF I       WEXLJD-  -MSI
ORMS A +BMDO3M, GENERAL FACTOR ANALYSIS, A PROGRAM THAT PERF       DIXOWJ-  -BMG
    PRINCIPAL AXIS FACTOR ANALYSIS, VARIMAX ROTATION               VELDDJ-  -API
400-CHANNEL OUTPUT BY A FACTOR AND SUMS SELECTED AREAS.=           OGBORE-  -CCP
        A PROGRAM FOR FACTOR ESTIMATION.=                          KINGFJ-  -PFE
LIKELIHOOD ESTIMATE OF FACTOR LOADINGS.=   + LAWLEY MAXIMUM        DEPTHE-03-GNN
2 VARIMAX ROTATION OF A FACTOR MATRIX (KAISER).=   G3 HED FO       MEIEP -03-GHF
O UCM FO2 ROTATION OF A FACTOR MATRIX.=              G             MEIEP -06-GUF
LE NUMBER OF CHANNELS + FACTOR MULTIPLIER--MULTIPLIES VARIAB       OGBORE-  -FMM
                        FACTOR MULTIPLIER, 7 COLUMN.=              OGBORE-  -FMC
    LCR NO 4 'STRUCTURE FACTOR PROGRAM AND LEAST-SQUARES           PATTAL-  -INS
FOR NORMALIZED VARIMAX FACTOR ROTATION.=            A PROGRAM      BENDAW-  -PNV
S, VARIMAX ROTATION AND FACTOR SCORE COMPUTATION.= + ANALYSI       VELDDJ-  -API
        A FACTOR SCORE PROGRAM.=                                   MILLC -  -FSP
    AN CRTHOGONAL FACTOR SIMILARITY PROGRAM.=                      BENDAW-  -DFS
ZED VARIMAX RCTATION OF FACTOR SOLUTIONS.=         NORMALI         OVERJE-  -NVR
IONS IN DISCRIMINANT OR FACTOR SPACE.= + CENTROIDS, DISPERS        MEIEP -02-GHF
OF CHANNELS BY A COMMON FACTOR.=           + VARIABLE NUMBER       OGBORE-  -FMM
(A) INTERCORRELATION + FACTOR--A PACKAGE PROGRAM TO PRODUCE        VELDDJ-  -FPP
ALL CUMBINATIONS OF FACTOR-VECTORS FROM TWO INDEPENDENT            VELDDJ-  -MPC
```

30

31

```
D).=                    GO UOC F02 SURVIVAL TABLES (ACTUARIAL METHO     MEIEP -09-GUF
OLS.=                   GO HED F02 TEST H**2, WITH COVARIANCE CONTR      MEIEP -05-GHF
IANCE COV. ADJUS+G4 HED F02 TWO TO THREE WAY ANALYSIS OF VAR             MEIEP -04-GHF
RIX (KAISER).=      G3 HED F02 VARIMAX ROTATION OF A FACTOR MAT          MEIEP -03-GHF
                    G1-UCM- F02--GENERAL CHI-SQUARE.=                    MEIEP -  -GUF
ATION.=             GO-UOC- F02, WEIGHTED MEAN AND STANDARD DEVI         MEIEP -01-GUF
ATION.=             GO-UOC- F02, WEIGHTED MEAN AND STANDARD DEVI         MEIEP -13-GUF
HE NUMBER OF DEGREES OF FREEDOM AND THE VALUE OF T.=+GIVEN T             SULZES-01-PCO
   NUMBER OF DEGREES OF FREEDOM AND THE VALUE OF THE CHI-SQU             SULZES- -PCO
STIC AND THE DEGREES OF FREEDOM.= + F TEST GIVEN THE F STATI             SULZES- -CPV
VIATE WITH R DEGREES OF FREEDOM.= + GENERATE A CHI-SQUARE DE             DEPTHE-04-GNN
       PROGRAM TO FIND FREQUENCIES AND PATTERNS OF ANY ONE              DIXOWJ- -BDD
WAY CROSSTABULATIONS OF FREQUENCIES AND PERCENTAGE.= + THREE             DEPTHE-28-GNN
 OF THEIR DISTRIBUTION, FREQUENCIES AND RANGES.=  + THE FORM             DEPTHE-29-GNN
 THE PROBABILITY OF THE FREQUENCIES IN THE CELLS COMING                 STERT - -MFS
D DISPROPORTICNATE CELL FREQUENCIES.=          + FOR UNEQUAL AN          OVERJE- -TWA
FOR PROPORTICNATE CELL FREQUENCIES.= + ANALYSIS OF VARIANCE              OVERJE-02-TWA
FOR PROPORTICNATE CELL FREQUENCIES.= +; ANALYSIS OF VARIANCE             OVERJE-01-TWA
A PROGRAM TO COMPUTE FREQUENCIES, PERCENT DISTRIBUTION,                 YERUJ - -PCF
PROGRAM TO COMPUTE FREQUENCIES, STANDARD DEVIATIONS                     MASSFJ-01-XTW
NCTIONS.=              FREQUENCY ANALYSIS OF CORRELOGRAM FU              OVERJE- -FAC
TA WITH CHI-SCUARE +  FREQUENCY ANALYSIS OF QUALITATIVE DA              OVERJE- -FAQ
  TO COMPUTE TWO-WAY FREQUENCY AND PERCENTAGE TABLES,                   DIXOWJ- -BSC
 USING UNIT +  COUNT-A FREQUENCY COUNT DISTRIBUTION PROGRAM             SAKOJM- -CFC
      IMP003-A FREQUENCY DISTRIBUTION PROGRAM.=         STERT - -MFD
CODE-GENERAL CODING AND FREQUENCY DISTRIBUTION ROUTINE.=    G           SAKOJM- -GGC
    A PROGRAM TO GET FREQUENCY DISTRIBUTIONS AND STATISTI               VELDDJ- -CPG
        KSL 4.00- FREQUENCY DISTRIBUTIONS.=                             DICKKW- -KFD
                 FREQUENCY FUNCTION COMPUTATIONS.=                      ROSEMA- -FFC
G DATA USING +COMPUTING FREQUENCY RESPONSE FROM PULSE TESTIN            CLEMWC- -CFR
G DATA USING +COMPUTING FREQUENCY RESPONSE FROM PULSE TESTIN            CLEMWC-01-CFR
   DESIGNED TO COMPUTE FREQUENCY TABLES AND BASIC STATISTIC             MERRHH- -CTP
GRAM TO CUMPUTE TWO-WAY FREQUENCY TABLES OF DATA INPUT.=+PRO            DIXOWJ-03-BDC
 PROGRAM THAT GENERATES FREQUENCY TABLES.=           IMP014-A          STERT -02-MPT
CHI-SCUARE FOR A SET OF FREQUENCY TABLES.=          KSL 2.61--          DICKKW- -KCS
        PRETAB II-A FREQUENCY TABULATOR PROGRAM.=                       HARTD - -PIF
  EUCLIDIAN DISTANCE FUNCTION CLASSIFICATION.=                         OVERJE- -EDF
       FREQUENCY FUNCTION COMPUTATIONS.=                                ROSEMA- -FFC
    OF TWO GROUPS-THE FUNCTION IS THEN USED AS AN INDEX                 DIXOWJ- -BMD
 THAT COMPUTES A LINEAR FUNCTION OF P VARIABLES MEASURED ON             DIXOWJ- -BMD
TO DISCRETE VALUES OF A FUNCTION OF TWO VARIABLES.=+A PLANE             DEPTHE-01-EHN
TO DISCRETE VALUES OF A FUNCTION OF TWO VARIABLES.=+A PLANE             DEPTHE-01-EHT
 SERIES TO ANY PERIODIC FUNCTION OR TIME SERIES.=   +; FOURIER          SULZES- -FFS
-NIH011G A DISCRIMINANT FUNCTION PROGRAM.=           G2-NIH            DEPTHE-18-GNN
   ICR NO 15 'MINIMUM FUNCTION PROGRAM'.=                              PATTAL- -INM
  PRODUCES DISCRIMINANT FUNCTION SCORES, CHI-SQUARES REGARDI            VELDDJ- -GPP
E F PROBABILITY DENSITY FUNCTION.=     + A TABLE LOOKUP OF TH           DEPTHE-06-GNN
OR THE +; TRIGONOMETRIC FUNCTIONS ACCORDING TO BRAGG'S LAW F            PARNBL- -TFA
COMPUTE A SET OF LINEAR FUNCTIONS FOR THE PURPOSE OF CLASSIF            DIXOWJ-01-BMD
2 MULTIPLE DISCRIMINANT FUNCTIONS.=              GO HED FO              MEIEP -07-GHF
ANALYSIS OF CCRRELOGRAM FUNCTIONS.=              FREQUENCY              OVERJE- -FAC
ELY RELATED PROBABILITY FUNCTIONS.= + DERIVATIVE OF TWO CLOS            DEPTHE-08-GNN
ELY RELATED PROBABILITY FUNCTIONS.=+ AND/OR AREA OF TWO CLOS            DEPTHE-07-GNN
IX MULTIPLICATION.=      F1-HADM-NAMULT REAL AND COMPLEX MATR           DEPTHE- -FHN
```

33

34

```
AN EXAMINATION OF THE GLYCINE-URATE HYPOTHESIS IN PRIMARY      NUGECA-    -EGU
                       GO HED FO2 CANONICAL CORRELATIONS.=      MEIEP -    -GHF
TION.=                 GO HED FO2 MAXIMUM CANONICAL CORRELA     MEIEP -01-GHF
CTIONS.=               GO HED FO2 MULTIPLE DISCRIMINANT FUN     MEIEP -07-GHF
E CONTROLS.=           GO HED FO2 TEST H**2, WITH COVARIANC     MEIEP -05-GHF
                       GO UCM FO2 GENERAL PLOT.=               MEIEP -25-GUF
                       GO UCM FO2 GUTTMAN SCALING NO 1.=        MEIEP -29-GUF
T 2).=                 GO UCM FO2 GUTTMAN SCALING NO 2 (PAR     MEIEP -02-GUF
T 3).=                 GO UCM FO2 GUTTMAN SCALING NO 2 (PAR     MEIEP -03-GUF
T 1).=                 GO UCM FO2 GUTTMAN SCALING NO 2 (PAR     MEIEP -28-GUF
ATE.=                  GO UCM FO2 LIFE TABLE AND SURVIVAL R     U OFOF-    -GUF
IX.=                   GO UCM FO2 ROTATION OF A FACTOR MATR     MEIEP -06-GUF
X).=                 3 GO UCM FO2 SUBROUTINE ROTATE (VARIMA     MEIEP -08-GUF
L METHOD).=            GO UOC FO2 SURVIVAL TABLES (ACTUARIA     MEIEP -09-GUF
L METHOD).=            GO-UOC-BIN SURVIVAL TABLES (ACTUARIA     MEIEP -    -GUB
RD DEVIATION.=         GO-UOC-FO2, WEIGHTED MEAN AND STANDA     MEIEP -01-GUF
RD DEVIATION.=         GO-UOC-FO2, WEIGHTED MEAN AND STANDA     MEIEP -13-GUF
C REGRESSION (LOGISTIC, GOMPERTZ, ETC).=   BMDO6R, ASYMPTOTI    DIXOWJ-    -BRA
E HYPOTHESIS IN PRIMARY GOUT.=          + OF THE GLYCINE-URAT   NUGECA-    -EGU
TH AN ASSOCIATED LINEAR GRAPH.=   + DECOMPOSITION OF A SET WI   CHRIA -    -HPH
    FACTORS FOR A CRYSTAL GROUND AS AN ALLIPSOID OF REVOLUTION  PATTAL-    -INA
          PROGRAM TO GROUP DATA INTO SPECIFIED NUMBER OF        DIXOWJ-02-BDD
          MULTIPLE GROUP DISCRIMINANT ANALYSIS.=               ROSEG -    -MGD
CHI-SQUARES REGARDING GROUP MEMBERSHIP AND PROBABILITIES        VELDDJ-    -GPP
          A GROUP MULTIPLE REGRESSION ANALYSIS.=               MEDICO-    -GMR
     THAT WILL READ A GROUP OF SETS OF NUMBERS AND EXTRACT      DICKKW-01-KPT
IFICATION, WITH UNEQUAL GROUP SIZES.=+ ONE VARIABLE OF CLASS    DIXOWJ-    -BVM
S OF MEMBERSHIP IN EACH GROUP.=+ MEMBERSHIP AND PROBABILITIE    VELDDJ-    -GPP
MPLETE HIERARCHIAL +     GROUP--A PROGRAM WHICH PERFORMS A CO    VELDDJ-    -GPW
A COMPLETE HIERARCHIAL GROUPING ANALYSIS BASED ON DISTANCES     VELDDJ-    -GPW
SYMMETRICAL PAIRED DATA GROUPINGS.= + THE COEFFICIENTS FOR A    STERT -    -MCC
     ANALYSIS FOR SEVERAL GROUPS A PROGRAM TO COMPUTE A SET     DIXOWJ-01-BMD
       SPECIFIED NUMBER OF GROUPS BASED ON THE ORDER OF ENTRY   DIXOWJ-02-BDD
  AMONG A SET OF SUBJECT GROUPS ON A SERIES OF DEPENDENT        VELDDJ-01-APD
PROGRAM FOR INDEPENDENT GROUPS.=                    A T-TEST    BENDAW-    -TTP
CRIMINANT ANALYSIS--TWO GROUPS.=             G1 UCM FO2 DIS     MEIEP -14-GUF
MINANT ANALYSIS-SEVERAL GROUPS.=           G1 UCM MIX DISCRI    MEIEP -06-GUM
CRIMINATION BETWEEN THE GROUPS.=  + USED AS AN INDEX FOR DIS    DIXOWJ-    -BMD
UAL INTO ONE OF SEVERAL GROUPS.= + OF CLASSIFYING AN INDIVID    DIXOWJ-01-BMD
EACH INDIVIDUAL OF TWO GROUPS-THE FUNCTION IS THEN USED AS      DIXOWJ-    -BMD
       ANALYSIS FOR TWO GROUPS, A PROGRAM THAT COMPUTES A       DIXOWJ-    -BMD
ANCE BETWEEN AND WITHIN GROUPS, COMPARES WITH F-TEST.=+ VARI    STERT -    -MOW
                       GROWTH CURVES.=                         KRONLH-    -GC
           A HUMAN GROWTH HORMONE ASSAY PROGRAM.=             BECKP -    -HGH
SINGLE PLANE, VISUALLY GUIDED ROTATION.=    + FOR MULTIPLE,     CATTRB-    -RPM
SIGNS PROPER +   BMDO5S GUTTMAN SCALE NO 1 A PROGRAM THAT AS    DIXOWJ-01-BSG
THAT PERFORMS +  BMDO6S GUTTMAN SCALE NO 2 PART 1 A PROGRAM     DIXOWJ-02-BSG
M THAT PERFORMS +BMDO7S GUTTMAN SCALE NO 2 PART 2 THE PROGRA    DIXOWJ-03-BSG
M THAT PERFORMS +BMDO8S GUTTMAN SCALE NO 2 PART 3 THE PROGRA    DIXOWJ-04-BSG
MAJOR COMPUTATIONS OF GUTTMAN SCALE NO 2 RESPONDENTS ARE        DIXOWJ-03-BSG
     THE FINAL STEPS OF GUTTMAN SCALE NO 2 SCORES ARE ASSIGN    DIXOWJ-04-BSG
S THE INITIAL STEPS FOR GUTTMAN SCALE NO 2.=   + THAT PERFORM   DIXOWJ-02-BSG
THAT PERFORMS +BMDO4S, GUTTMAN SCALE PREPROCESSOR A PROGRAM     DIXOWJ-    -BSG
THE CASES AND ASSIGNS A GUTTMAN SCALE SCORE FOR EACH CASE.=     DIXOWJ-01-BSG
```

BY ORTHOGONAL POLYNOMI+ G2-NIH-NIH147-POLYNOMIAL REGRESSION   DEPTHE-26-GNN
GISTIC, GOMPERTZ, ETC)+ G2-UCM-FO2 ASYMPTOTIC REGRESSION (LO   MEIEP -17-GUF
ORRELATION ANALYSIS + G2-UCM-FO2 MULTIPLE REGRESSION AND C   MEIEP -19-GUF
MODIFIED 06).=   G2-UCM-FO2 MULTIPLE REGRESSION NO3 (MEIEP -18-GUF
RESSION (MODIFIED BIMD+ G2-UOC-MIX, GENERALIZED STEPWISE REG   MEIEP -07-GUM
TOR MATRIX (KAISER).= G3 HED FO2 VARIMAX ROTATION OF A FAC   MEIEP -03-GHF
.=   G3 UCM MIX TIME SERIES ANALYSIS NO 1   MEIEP -01-GUM
.=   G3 UCM MIX TIME SERIES ANALYSIS NO 2   MEIEP - -GUM
 OF VARIANCE COV. ADJU+ G4 HED FO2 TWO TO THREE WAY ANALYSIS   MEIEP -04-GHF
                       G4 UCM FOR ANALYSIS OF COVARIANCE.=   MEIEP -11-GUA
OR ANOVA.=   G4 UCM FO2 GENERAL HYPOTHESIS NO 2 F   MEIEP -05-GUF
 FOR ANOVA.=   G4 UCM FO2 GENERAL LINEAR HYPOTHESIS   MEIEP -04-GUF
                       G4 UCM MIX ANALYSIS OF COVARIANCE.=   MEIEP -03-GUM
.=   G4 UCM MIX ANALYSIS OF VARIANCE NO 2   MEIEP -04-GUM
=   G4 UCM MIX ANALYSIS OF VARIANCE NO1.   MEIEP -02-GUM
F VARIANCE PROGRAM.=   G4-NIH-NIHO18G--A ONE WAY ANALYSIS O   DEPTHE-12-GNN
TE A CHI-SQUARE DEVIAT+ G5-NIH-NIHO15-A SUBROUTINE TO GENERA   DEPTHE-04-GNN
VARIOUS STATISTICS +   G6-NIH-NIHO17G A PROGRAM TO COMPUTE   DEPTHE-14-GNN
ORDINATE AND/OR AREA + G6-NIH-NIHO19--A PROGRAM TO COMPUTE   DEPTHE-07-GNN
A TABLE LOOKUP OF THE + G6-NIH-NIHO20--A PROGRAM TO PERFORM   DEPTHE-06-GNN
INDIVIDUAL AND TOTAL + G6-NIH-NIHO21--A PROGRAM TO COMPUTE   DEPTHE-05-GNN
THE ABSCISSA FROM THE + G6-NIH-NIHO22--A PROGRAM TO COMPUTE   DEPTHE-08-GNN
OOKUP PROGRAM.=   G6-NIH-NIHO23--A STUDENT'S T TABLE L   DEPTHE-11-GNN
THE CHI-SQUARE OF THE + G6-NIH-NIH120--A PROGRAM TO COMPUTE   DEPTHE-10-GNN
          GO HED FO2 TEST H**2, WITH COVARIANCE CONTROLS.=   MEIEP -05-GHF
          PATTERNS, FORM H, THIS PROGRAM FINDS THE HIGHEST   DICKKW-01-KAP
TRAL ANALYSIS.=   G2- HADF-ACSASM AUTOCORRELATION AND SPEC   DEPTHE- -GHA
AL FIT.=   E2- HADF-POLFDTP--LEAST SQUARES POLYNOMI   DEPTHE- -EHP
R INTERPOLATION +   E1- HADM--NBINTR--TABLE LOOKUP AND LINEA   DEPTHE- -EHN
TERMINANTS OF REAL +F3- HADM-NADETR A PROGRAM TO EVALUATE DE   DEPTHE-01-FHN
ERPOLATION.=   E1- HADM-NAINTP--MULTIVARIATE LINEAR INT   DEPTHE-02-EHN
PLEX MATRICES.=   F4- HADM-NAINVS INVERSION OF REAL OR COM   DEPTHE-02-FHN
MULTIPLICATION.=   F1- HADM-NAMULT REAL AND COMPLEX MATRIX   DEPTHE- -FHN
TERPOLATION, A PROG+E1- HADM-NBBIVA--LAGRANGIAN BIVARIATE IN   DEPTHE-01-EHN
INGULAR SQUARE MATR+F4- HADM-NBMATX INVERSION OF A REAL NONS   DEPTHE-03-FHN
TANEOUS EQUATIONS.= F4- HADM-SHINVR A PROGRAM TO SOLVE SIMUL   DEPTHE- -FHS
GREE LAGRANGIAN +   E1- HADM-TEAARD--A THREE POINT SECOND DE   DEPTHE- -EHT
TERPOLATION, A PROG+E1- HADM-TEDUBL--LAGRANGIAN BIVARIATE IN   DEPTHE-01-EHT
      PROGRAM TO COMPUTE HALF-LIFE OF EACH CHANNEL OF A SPECT   OGBORE- -PTP
PERIODIC REGRESSION AND HARMONIC ANALYSIS, A PROGRAM THAT   DIXOWJ- -BRP
 SERIES UP TO THE NINTH HARMONIC.= + SQUARES A TRIGONOMETRIC   DIXOWJ- -BRP
MBERS TO IDENTIFY CASES HAVING THESE DATA PATTERNS.=+CASE NU   DIXOWJ-01-BDD
 TWO-DIMENSIONAL SYSTEM HAVING UNEQUAL NUMBER OF OBSERVATION   STERT -01-MPD
PROCESS OF STIMULI OVER HEART TISSUE.= + OF THE PROPAGATION   RHEIWC- -MMP
             GO HED FO2 CANONICAL CORRELATIONS.=   MEIEP - -GHF
SCRIMINANT OR FACTOR+G1 HED FO2 CENTROIDS, DISPERSIONS IN DI   MEIEP -02-GHF
             G2 HED FO2 CORRELATION ANALYSIS.=   MEIEP -06-GHF
 REAL SYMMETERIC +   F2 HED FO2 EIGENVALUES AND VECTORS OF A   MEIEP - -FHF
 NONSYMMETRIC MATRIX+F2 HED FO2 EIGENVECTORS AND VALUES OF A   MEIEP -01-FHF
N.=   GO HED FO2 MAXIMUM CANONICAL CORRELATIO   MEIEP -01-GHF
CNS.=   GO HED FO2 MULTIPLE DISCRIMINANT FUNCTI   MEIEP -07-GHF
             G2 HED FO2 MULTIPLE REGRESSION.=   MEIEP -08-GHF
S CORR OR DISPER +   F2 HED FO2 PRINCIPAL COMPONENTS ANALYSI   MEIEP -02-FHF
S (RAW SCORES).=   F2 HED FO2 PRINCIPAL COMPONENTS ANALYSI   MEIEP -03-FHF

37

```
CNTROLS.=                 GO HED FO2 TEST H**2, WITH COVARIANCE C   MEIEP -05-GHF
 VARIANCE COV. ADJUS+G4 HED FO2 TWO TO THREE WAY ANALYSIS OF        MEIEP -04-GHF
  MATRIX (KAISER).=      G3 HED FO2 VARIMAX ROTATION OF A FACTOR     MEIEP -03-GHF
L DATA REDUCTION.=    G1- HEDP-CORANL-A PROGRAM FOR STATISTICA       DEPTHE-   -GHC
NCES BETWEEN MEANS WITH HETEROGENEOUS VARIANCE.=+FOR DIFFERE         STERT -    -MPT
L ANALYSIS OF VARIANCE, HI-AOV.=   A PROGRAM FOR HIERARCHICA         PULLG -   -PHA
TO LIST THE + XTAB10 ( HI-LOW PROGRAM) A SCREENING PROGRAM           MASSFJ-   -XHL
ICAL DECOMPOSITION OF + HIDECS 2--A PROGRAM FOR THE HIERARCH         CHRIA -   -HPH
   PERFORMS A COMPLETE HIERARCHIAL GROUPING ANALYSIS BASED           VELDDJ-   -GPW
I-AOV.=   A PROGRAM FOR HIERARCHICAL ANALYSIS OF VARIANCE, H         PULLG -   -PHA
 2--A PROGRAM FOR THE HIERARCHICAL DECOMPOSITION OF A SET            CHRIA -   -HPH
ICH WILL PRINT ONLY THE HIGH AGREEMENTS PER PERSON.=     + WH        DICKKW-   -KRA
          KSL 2.30- HIGHER ORDER PARTIAL CORRELATIONS.=              DICKKW-   -KHO
THIS PROGRAM FINDS THE HIGHEST AGREEMENT SCORE AMONG ALL             DICKKW-01-KAP
           IMPO22-A HISTOGRAM GENERATING PROGRAM.=                   STERT -    -MHG
   PROGRAM THAT PLOTS A HISTOGRAM OF PERCENTAGE DIFFERENCES.         NICHHC-10-TTH
 GENERAL PLOT INCLUDING HISTOGRAM.=                 BMD05D,          DIXOWJ-   -BDG
STOGRAM OF +T-TEST WITH HISTOGRAM--A PROGRAM THAT PLOTS A HI         NICHHC-10-TTH
11--ONE WAY TABLES WITH HISTOGRAMS PLOT.=             XTAB           MASSFJ-   -XOW
RED ONE-WAY TABLES WITH HISTOGRAMS.=           XTAB12--PAI           MASSFJ-   -XPO
     OF STRATA WITH HISTOGRAMS--A PROGRAM TO GROUP DATA              DIXOWJ-02-BDD
  BARTLETT'S TEST FOR HOMOGENEITY OF VARIANCES.=                     MCMACA-   -BST
      A HUMAN GROWTH HORMONE ASSAY PROGRAM.=                         BECKP -   -HGH
   DILUTION METHODS FOR HORMONE PRODUCTION RATE DETERMINATIO         NUGECA-   -IDM
E EXCESS REACTIVITY+IN- HOUR EQUATION--A PROGRAM TO DETERMIN         OGBORE-   -HEP
THEMATICAL MODEL OF THE HUMAN EXTERNAL RESPIRATORY SYSTEM.=          DANTGB-   -MMH
            A HUMAN GROWTH HORMONE ASSAY PROGRAM.=                   BECKP -   -HGH
DISPOSAL OF CORTISOL IN HUMANS.=       THE DISTRIBUTION AND          NUGECA-   -DDC
OPULATIONS.=   TESTS OF HYPOTHESES CONCERNING MEANS OF TWO P         MCMACA-   -THC
 UCM FO2 GENERAL LINEAR HYPOTHESIS FOR ANOVA.=           G4          MEIEP -04-GUF
  OF THE GLYCINE-URATE HYPOTHESIS IN PRIMARY GOUT.=                  NUGECA-   -EGU
 G4 UCM FC2 GENERAL HYPOTHESIS ND 2 FOR ANOVA.=                      MEIEP -05-GUF
TEST PROGRAM TESTS THE HYPOTHESIS THAT ONE OF TWO RANDOM             STERT -    -MMT
 BMDO6V GENERAL LINEAR HYPOTHESIS WITH CONTRASTS.=                   DIXOWJ-01-BVG
 BMDO5V GENERAL LINEAR HYPOTHESIS.=                                  DIXOWJ-   -BVG
     A GENERAL LINEAR HYPOTHESIS.=                                   MCKIRE-   -GLH
NAL FACTORS FCR A GIVEN HYPOTHESIS.=   + BEST FITTING ORTHOGO        SAUNDR-   -PFB
IMPLEX METHOD).=         H1-NIH-NIH119--LINEAR PROGRAMMING (S        DEPTHE-   -HNN
   PROBIT ANALYSIS PART I.=                                          OGBORE-   -PAP
THE SETAR MARK III AND IBM 1620 COMPUTER.=      + UTILIZING          BLACCR-   -ACA
FOURIER SUMMATION PROG+ ICR NO 1 'THREE AND TWO DIMENSIONAL          PATTAL-   -INT
CRYSTAL GROUND AS AN + ICR NO 10 'ABSORPTION FACTORS FOR A           PATTAL-   -INA
  GENIOSTAT'.=          ICR NO 11 'DATA REDUCTION FOR THE GE         PATTAL-   -IND
N ROUTINE'.=            ICR NO 12 'WEISSENBERG DATA REDUCTIO         PATTAL-   -INW
AND ANGLES'.=           ICR NO 13-14 'INTERATOMIC DISTANCES          PATTAL-   -INI
.=                      ICR NO 15 'MINIMUM FUNCTION PROGRAM'         PATTAL-   -INM
ENIOSTAT) COORDINATES'+ ICR NO 2 'SINGLE CRYSTAL ORIENTER (G         PATTAL-01-INS
ND LEAST-SQUARES SUM + ICR NO 4 'STRUCTURE FACTOR PROGRAM A          PATTAL-   -INS
                        ICR NO 6 'FOURIER DATA TAPE MAKER'.=         PATTAL-   -INF
ND PARAMETER SHIFTER'.+ ICR NO 7 'LEAST-SQUARES SUM SOLVER A         PATTAL-01-INL
'.=                     ICR NO 8 'LEAST-SQUARE PLANE PROGRAM         PATTAL-   -INL
ANY PLANE'.=            ICR NO 9 'POINT-BY-POINT FOURIER IN          PATTAL-   -INP
    CR CASE NUMBERS TO IDENTIFY CASES HAVING THESE DATA              DIXOWJ-01-BDD
  ITEM ANALYSIS PROGRAM II.=                                         BENDAW-   -IAP
```

Contrails

```
                 LOOKUP AND LINEAR  INTERPOLATION ROUTINE.=                          DEPTHE-   -EHN
     TP--MULTIVARIATE LINEAR  INTERPOLATION.=              E1-HADM-NAIN              DEPTHE-02-EHN
                      BIVARIATE  INTERPOLATION, A PROGRAM TO FIT A                   DEPTHE-01-EHT
                      BIVARIATE  INTERPOLATION, A PROGRAM TO FIT A                   DEPTHE-01-EHN
        .=  USE OF COMPUTERS IN  INTERPRETATION OF ELECTROCARDIOGRAMS                PIPBHV-   -UCI
     YSIS.= MAPS A SYSTEM OF  INTERRELATED PROGRAM FOR FACTOR ANAL                   WEXLJD-   -MSI
        CASES INTO SPECIFIED  INTERVALS OF ONE VARIABLE AND COMPUT                   DIXOWJ-03-BDD
     ITH MULTIPLE CONFIDENCE  INTERVALS.=       + LINE FIT PROGRAM W                 MEDICO-   -SLF
     ROGRAM USING UNIT CLASS  INTERVALS.=   + COUNT DISTRIBUTION P                   SAKOJM-   -CFC
     TICAL MEASURES ON THESE  INTERVALS.=   + COMPUTE SIMPLE STATIS                  DIXOWJ-03-BDD
     T TO NATURAL CLUSTERING  INTRACLASS CORRELATION.=       + SUBJEC                HOPKCG-   -VMS
            OF PSYCHOLOGICAL  INVENTORIES BY THE METHOD OF RECIPRO                   BAKEFB-   -PSP
     RE MATRL+F4-HADM-NBMATX  INVERSION OF A REAL NONSINGULAR SQUA                   DEPTHE-03-FHN
     S.=      F4-HADM-NAINVS  INVERSION OF REAL OR COMPLEX MATRICE                   DEPTHE-02-FHN
        IMPO21--A MATRIX  INVERSION PROGRAM.=                                        STERT -   -IMI
     NIH 001F GENERAL MATRIX  INVERSION PROGRAM.=           F1-NIH-                   DEPTHE-12-FNN
     F1-NIH-NIHC12 MATRIX  INVERSION.=                                               DEPTHE-03-FNN
        SQUARE ROOT MATRIX  INVERSION.=                                              OVERJE-   -SRM
     F1-NIH-NIH005 MATRIX  INVERSION-SOLUTION OF LINEAR EQUATIO                      DEPTHE-02-FNN
     ACTIVITY OF NEURON  IRRADIATED SAMPLE FOR VARIABLE IRRAD                        OGBORE-   -SAV
     TED SAMPLE FOR VARIABLE  IRRADIATION TIMES.= + NEURON IRRADIA                   OGBORE-   -SAV
     F RADIOACTIVE ISOTOPES+  ISAN-DETERMINATION OF THE PRESENCE O                   CARLJP-   -IDP
     STACY SPECIAL (REACTOR  ISOTOPE ACCOUNT)--THE PROGRAM PREPAR                    OGBORE-   -SSR
                             ISOTOPE ACCOUNTABILITY.=                                OGBORE-   -IA
                 REGION  ISOTOPE CONTENT.=                                           OGBORE-   -RIC
     PRODUCTION RATE DETER+  ISOTOPE DILUTION METHODS FOR HORMONE                    NUGECA-   -IDM
     ANALYSIS (SIMULTANEOUS  ISOTOPE METHOD).=         BLOOD VOLUME                  LANGS -   -BVA
     ECORD + REACTOR CREATED  ISOTOPE PRODUCTION AND DISPOSITION R                   OGBORE-   -RCI
     PRESENCE OF RADIOACTIVE  ISOTOPES BY A QUALITATIVE ANALYSIS                     CARLJP-   -IDP
        SCORING TEST ANALYSIS  ITEM ANALYSIS AND FACTOR ANALYSIS                     WOLFR -   -TPT
     VOCATIONAL INTEREST+AN  ITEM ANALYSIS PROGRAM FOR THE STRONG                    BENDAW-01-IAP
                             ITEM ANALYSIS PROGRAM II.=                              BENDAW-   -IAP
                    AN  ITEM ANALYSIS PROGRAM.=                                      BENDAW-02-IAP
     TERION VARIABLE.=       ITEM ANALYSIS USING A CONTINUOUS CRI                    IKERHP-01-IAU
     ITERION VARIABLE.=      ITEM ANALYSIS USING A DICHOTOMOUS CR                    IKERHP-   -IAU
                 PARTIAL  ITEM ANALYSIS.=                                            WALKG -   -PIA
     AM FOR TEST SCORING AND  ITEM ANALYSIS.=            A PROGR                     BAKEFD-   -PTS
            (CORRELATION WITH  ITEM DELETION) A PROGRAM TO COMPUTE                   DIXOWJ-01-BDC
     OF ONE-COLUMN DATA AND  ITEM NUMBERS OR CASE NUMBERS TO                         DIXOWJ-01-BDD
     SYMMETRIC MATRIX BY THE  JACOBI METHOD.=        + OF A REAL                     DEPTHE-06-FNN
     A PROGRAM THAT COMPUTES  JOINT AGREEMENT PATTERNS.=+ FORM G,                    DICKKW-   -KAP
        3--PROBABILITIES OF  K INDEPENDENT TRIALS X N EVENTS (VAR                    FRAN -    -TPK
     FURMATIONS.=  KSL 2.20,  K-14--MULTIPLE REGRESSION WITH TRANS                   DICKKW-   -KKM
     MIAL TO A SET+KSL 4.40,  K-3--A LEAST SQUARES FIT OF A POLYNO                   DICKKW-   -KKL
            KSL 2.15  K-5 AUTO CORRELATION.=                                         DICKKW-   -KKA
     IANCE- COVARI+KSL 2.00,  K-8-PRODUCT-MOMENT CORRELATIONS, VAR                   DICKKW-   -KKP
     V, COVARIANCE+KSL 2.05,  K-9-CORRELATIONS, MEANS, STANDARD DE                   DICKKW-   -KKC
     CN OF A FACTOR MATRIX (  KAISER).=   G3 HED FO2 VARIMAX ROTATI                  MEIEP -03-GHF
            A PROGRAM FOR  KENDALL'S TAU.=                                           BECKSL-   -PKS
        6 A PROGRAM TO PLOT  KINDRED CHARTS FOR THE EXPLORATION                      FRAN -    -TPP
     WHEN REACTOR PERIOD IS  KNOWN.=+ DETERMINE EXCESS REACTIVITY                    OGBORE-   -HEP
     TIONS, VARIANCE- COVAR+  KSL 2.00, K-8-PRODUCT-MOMENT CORRELA                   DICKKW-   -KKP
     TANDARD DEV, COVARIANC+  KSL 2.05, K-9-CORRELATIONS, MEANS, S                   DICKKW-   -KKC
                             KSL 2.15 K-5 AUTO CORRELATION.=                         DICKKW-   -KKA
```

41

```
         TO PERFORM A TABLE LOOKUP OF THE F PROBABILITY DENSITY        DEPTHE-06-GNN
23--A STUDENT'S T TABLE LOOKUP PROGRAM.=              G6-NIH-NIHO      DEPTHE-11-GNN
      LIST THE + XTAB10 (HI- LOW PROGRAM) A SCREENING PROGRAM TO        MASSFJ-   -XHL
              KSL 4.80, M-15-LINEAR PROGRAMMING.=                       DICKKW-   -KML
         THAT PERFORMS THE MAJOR COMPUTATIONS OF GUTTMAN SCALE          DIXOWJ-03-BSG
NO 6 'FOURIER DATA TAPE MAKER'.=                              ICR       PATTAL-   -INF
M AND LEAST-SQUARES SUM MAKER'.=+ 4 'STRUCTURE FACTOR PROGRA            PATTAL-   -INS
   SUMMARY PROGRAM WHICH MAKES TABLES FOR ALL POSSIBLE COMBIN           SAKOJM-   -TTS
EQUATIONS IN A STEPWISE MANNER.=+MULTIPLE LINEAR REGRESSION             DIXOWJ-01-BRS
M FOR FACTOR ANALYSIS.+ MAPS A SYSTEM OF INTERRELATED PROGRA            WEXLJD-   -MSI
      UTILIZING THE SETAR MARK III AND IBM 1620 COMPUTER.=              BLACCR-   -ACA
THESIS THAT +  1MP015-- MARSHALL TEST PROGRAM TESTS THE HYPO            STERT -   -MMT
ROGRAM TO SOLVE COMPOS+ MASS DETERMINATION BY STRIPPING--A P            OGBORE-01-MDS
     PLIFIED VERSION.=   MASS DETERMINATION BY STRIPPING, SIM           OGBORE-   -MDS
  MATRIX COEFFICIENT AND MASS RATIO GENERATOR--A PROGRAM                OGBORE-   -MCM
 MATRIX COEFFICIENTS AND MASS RATIOS FOR ELEVEN ELEMENT ANALY           OGBORE-   -MCM
   OF COSINES OF ANGLES + MATCH--A PROGRAM TO COMPUTE A MATRIX          VELDDJ-   -MPC
RNAL RESPIRATORY SYST+A MATHEMATICAL MODEL OF THE HUMAN EXTE            DANTGB-   -MMH
N PROCESS OF STIMULI +A MATHEMATICAL MODEL OF THE PROPAGATIO            RHEIWC-   -MMP
         CORRELATION MATRICES OF DATA WITH MISSING VALUES              DAS RS-   -UPP
DUCT MOMENT CORRELATION MATRICES.=                        PRO           OVERJE-   -PMC
SION OF REAL CR COMPLEX MATRICES.=      F4-HADM-NAINVS INVER            DEPTHE-02-FHN
NTS OF REAL AND COMPLEX MATRICES.=   + TO EVALUATE DETERMINA            DEPTHE-01-FHN
AX ROTATION OF A FACTOR MATRIX (KAISER).=    G3 HED F02 VARIM           MEIEP -03-GHF
    NEARLY A TRIANGULAR MATRIX BY SIMILARITY TRANSFORMATIONS            DEPTHE-   -FNN
    OF A REAL SYMMETRIC MATRIX BY THE JACOBI METHOD.=                   DEPTHE-06-FNN
NERATOR--A PROGRAM + MATRIX COEFFICIENT AND MASS RATIO GE               OGBORE-   -MCM
 PROGRAM WHICH PREPARES MATRIX COEFFICIENTS AND MASS RATIOS             OGBORE-   -MCM
    SOLUTION OF A LINEAR MATRIX EQUATION BY THE SEIDEL METHOD           DEPTHE-10-FNN
         COVARIANCE MATRIX FOR PROFILE ANALYSIS.=                      DEPTHE-11-FNN
 PROGRAM TO TRANSFORM A MATRIX INTO NEARLY A TRIANGULAR                 DEPTHE-   -FNN
F1-NIH-NIH 001F GENERAL MATRIX INVERSION PROGRAM.=                      DEPTHE-12-FNN
          IMP021--A MATRIX INVERSION PROGRAM.=                          STERT -   -IMI
        F1-NIH-NIH012 MATRIX INVERSION.=                                DEPTHE-03-FNN
         SQUARE ROOT MATRIX INVERSION.=                                OVERJE-   -SRM
EQUATIONS+F1-NIH-NIH005 MATRIX INVERSION-SOLUTION OF LINEAR             DEPTHE-02-FNN
NAMULT REAL AND COMPLEX MATRIX MULTIPLICATION.=      F1-HADM-           DEPTHE-   -FHN
EIGENVALUES-VECTORS AND MATRIX MULTIPLICATIONS.=                        DEPTHE-04-FNN
  CALCULATE AND PRINT A MATRIX OF AGREEMENT SCORES AMONG A              DICKKW-   -KAS
   PROGRAM TO COMPUTE A MATRIX OF COSINES OF ANGLES BETWEEN             VELDDJ-   -MPC
CHI-SQUARE VALUES OF A MATRIX OF DICHOTOMOUS VARIABLES.=                FRAN  -   -TPC
02 ROTATION OF A FACTOR MATRIX.=                        GO UCM F        MEIEP -06-GUF
REAL NONSINGULAR SQUARE MATRIX.=              + INVERSION OF A          DEPTHE-03-FHN
D THE INTER-CORRELATION MATRIX.=   + STANDARD DEVIATIONS AN             DEPTHE-19-GNN
TATION ON A CORRELATION MATRIX.=   + ANALYSIS AND VARIMAX RO            DEPTHE-   -GNN
E REAL EIGENVALUES OF A MATRIX.=   + THE EIGENVECTORS FROM TH           DEPTHE-05-FNN
VECTORS OF NONSYMMETRIC MATRIX.=   F2-NIH-NIH010 EIGENVALUES-           DEPTHE-07-FNN
RS OF A REAL SYMMETERIC MATRIX.= + F02 EIGENVALUES AND VECTO            MEIEP -   -FHF
ANALYSIS CORR OR DISPER MATRIX.= + F02 PRINCIPAL COMPONENTS             MEIEP -02-FHF
ALUES OF A NONSYMMETRIC MATRIX.=+ HED F02 EIGENVECTORS AND V            MEIEP -01-FHF
VARIANCE OR CORRELATION MATRIX.=+OF LOADINGS FITS A GIVEN CO            DEPTHE-02-GNN
OF A NEARLY TRIANGULAR MATRIX.=+TO EVALUATE THE DETERMINANT             DEPTHE-08-FNN
   A SIMPLE CORRELATION MATRIX, OMITTING UNDESIRED VARIABLES            DIXOWJ-01-BDC
NGENCY COEFFICIENTS AND MAX LIKELIHOOD RATIOS.=      + CONTI            DIXOWJ-   -BSC
```

```
VIVAL TABLES (ACTUARIAL METHOD).=          GO UOC FO2 SUR    MEIEP -09-GUF
VIVAL TABLES (ACTUARIAL METHOD).=          GO-UOC-BIN SUR    MEIEP -  -GUB
AR PROGRAMMING (SIMPLEX METHOD).=      H1-NIH-NIH119--LINE   DEPTHE-  -HNN
S (SIMULTANEOUS ISOTOPE METHOD).=       BLOOD VOLUME ANALYSI  LANGS -  -BVA
MATION (VARIABLE METRIC METHOD).=   E2 UCC BIN NONLINEAR ESTI  MEIEP -  -EUB
MATION (VARIABLE METRIC METHOD).=   E2 UOC FO2 NONLINEAR ESTI  MEIEP -01-EUF
DETERM+ISOTOPE DILUTION METHODS FOR HORMONE PRODUCTION RATE   NUGECA-  -IDM
AR ESTIMATION (VARIABLE METRIC METHOD).=   E2 UCC BIN NONLINE  MEIEP -  -EUB
AR ESTIMATION (VARIABLE METRIC METHOD).=   E2 UOC FO2 NONLINE  MEIEP -01-EUF
    OF SMALL PARTICLES OR MICROBES IN A SOLUTION AS ANALYZED   SULZES-  -PCC
YSIS OF SAMPLES (WATER, MILK ETC).=  + BY A QUALITATIVE ANAL   CARLJP-  -IDP
         ICR NO 15 ' MINIMUM FUNCTION PROGRAM'.=              PATTAL-  -INM
   PROGRAM TO SELECT THE MINIMUM NUMBER OF INDEPENDENT VARIAB  DEPTHE-22-GNN
 SAMPLE AGAINST PLUS OR MINUS 2 SIGMA (CHAUVENET TEST).=       OGBORE-  -TST
                        MISCOREL.=                            VELDDJ-  -M
      MISCORP (SIMILAR TO MISCOREL).=                         VELDDJ-  -MSM
                        MISCORP (SIMILAR TO MISCOREL).=        VELDDJ-  -MSM
OGRAM WITH OBSERVATIONS MISSING CWOM.=        A CORRELATION PR  VANDJM-  -CPO
CE WITH REPLICATION AND MISSING DATA.=  + ANALYSIS OF VARIAN   STERT -01-MWA
      G1 UCM FO2 SIMPLE MISSING VALUE ROUTINE NO 3.=          MEIEP -27-GUF
N MATRICES OF DATA WITH MISSING VALUES.=       + CORRELATIO    DAS RS-  -UPP
          G4 UCM MIX ANALYSIS OF COVARIANCE.=                 MEIEP -03-GUM
          G4 UCM MIX ANALYSIS OF VARIANCE NO 2.=              MEIEP -04-GUM
          G4 UCM MIX ANALYSIS OF VARIANCE NO1.=               MEIEP -02-GUM
.=        G2 UCM MIX CORRELATION ANALYSIS (WITH PLOT)         MEIEP -05-GUM
          G1 UCM MIX DATA SCREENING NO 1.=                    MEIEP -13-GUM
          G1 UCM MIX DATA SCREENING NO 2.=                    MEIEP -14-GUM
          G1 UCM MIX DATA SCREENING NO 4.=                    MEIEP -12-GUM
OUPS.=    G1 UCM MIX DISCRIMINANT ANALYSIS-SEVERAL GR         MEIEP -06-GUM
        F2-UCM- MIX FACTOR ANALYSIS.=                         MEIEP -  -FUM
(MODIFIED BIMD + G2 UOC MIX GENERALIZED STEPWISE REGRESSION    MEIEP -11-GUM
(MODIFIED 09).=  G2 UCM MIX GENERALIZED STEPWISE REGRESSION    MEIEP -10-GUM
          G2 UCM MIX PERIODIC REGRESSION.=                    MEIEP -09-GUM
          G2 UCM MIX POLYNOMIAL REGRESSION.=                  MEIEP -08-GUM
          G3 UCM MIX TIME SERIES ANALYSIS NO 1.=              MEIEP -01-GUM
          G3 UCM MIX TIME SERIES ANALYSIS NO 2.=              MEIEP -  -GUM
  (MODIFIED BIMD+G2-UOC- MIX, GENERALIZED STEPWISE REGRESSION  MEIEP -07-GUM
 PROGRAM FOR CONVERTING MMPI RAW SCORES TO T-SCORES.=         LADDCE-  -CPC
IFFERENCE SCORES ON THE MMPI.=       + SCORES AND SUMS OF D    SULZES-  -CDS
LS ON A LINEAR LEARNING MODEL IN A 2-PERSON SITUATION.=+TRIA   CAMPDP-  -PMC
ORY SYST+A MATHEMATICAL MODEL OF THE HUMAN EXTERNAL RESPIRAT   DANTGB-  -MMH
STIMULI +A MATHEMATICAL MODEL OF THE PROPAGATION PROCESS OF    RHEIWC-  -MMP
D STEPWISE REGRESSION ( MODIFIED BIMD 34).=     + GENERALIZE   MEIEP -07-GUM
D STEPWISE REGRESSION ( MODIFIED BIMD 34).= + MIX GENERALIZE   MEIEP -11-GUM
LTIPLE REGRESSION NO3 ( MODIFIED 06).=      G2-UCM-FO2 MU      MEIEP -18-GUF
D STEPWISE REGRESSION ( MODIFIED 09).=+G2 UCM MIX GENERALIZE   MEIEP -10-GUM
CROSS TABULATION NO 3 ( MODIFIED 23).=       G1 UCM FO2        MEIEP -21-GUF
   TO CALCULATE PRODUCT MOMENT CORRELATION COEFFICIENTS.=     SAKOJM-  -CPC
           PRODUCT MOMENT CORRELATION MATRICES.=             OVERJE-  -PMC
5, UN-16, UN-17 PRODUCT MOMENT CORRELATION PROGRAMS.= + UN-1   SCHAKW-  -UUU
KSL 2.00, K-8-PRODUCT- MOMENT CORRELATIONS, VARIANCE- COVAR    DICKKW-  -KKP
  PROGRAM FOR PRODUCT- MOMENT INTERCORRELATION TETRACHORIC     VELDDJ-  -CPP
ING MODEL+A PROGRAM FOR MONTE CARLO TRIALS ON A LINEAR LEARN   CAMPDP-  -PMC
ENT VARIABLE AND ONE OR MORE INDEPENDENT VARIABLES.=+ DEPEND   DIXOWJ-  -BRS
```

```
TO TEST WHETHER TWO OR MORE VARIANCES DIFFER SIGNIFICANTLY    STERT -   -MQB
   TO ANALYZE PERINATAL MORTALITY BY SELECTED GESTATIONAL      CARLJP-   -PPA
                        MORTALITY RATES.=                       PARNBL-   -MR
R THE DESIGN CF OPTIMUM MULTIFACTORIAL EXPERIMENTS.=      + FO  SMITWN-   -PDO
OVARIANCE PROGRAM FOR A MULTIGROUP SYSTEM.=   + ANALYSIS OF C   STERT -   -MAC
   LINE FIT PROGRAM WITH MULTIPLE CONFIDENCE INTERVALS.=        MEDICO-   -SLF
ANALYSIS.=      MCORR--A MULTIPLE CORRELATION AND REGRESSION    SAKOJM-   -MMC
 PROGRAM WHICH COMPUTES MULTIPLE CORRELATION COEFFICIENTS.=     NICHHC-   -MCP
ES A PROGRAM TO COMPUTE MULTIPLE CORRELATION COEFFICIENTS.=     VELODJ-   -RPC
RAM WHICH COMPUTES +    MULTIPLE CORRELATION PROGRAM, A PROG    NICHHC-   -MCP
                        MULTIPLE COVARIANCE ANALYSIS.=          OVERJE-   -MCA
YSIS CF CUVARIANCE WITH MULTIPLE COVARIATES.=    BMD04V, ANAL   DIXOWJ-01-BVA
        GO HED FO2 MULTIPLE DISCRIMINANT FUNCTIONS.=           MEIEP -07-GHF
.=                      MULTIPLE GROUP DISCRIMINANT ANALYSIS    ROSEG -   -MGD
PROGRAM.=      LINEARV-A MULTIPLE LINEAR REGRESSION ANALYSIS    VELODJ-   -LML
  COMPUTE A SEQUENCE OF MULTIPLE LINEAR REGRESSION EQUATIONS    DIXOWJ-01-BRS
 METHO+G2-NIH-NIH009G-- MULTIPLE LINEAR REGRESSION, STEPWISE    DEPTHE-21-GNN
STS FOR UP TO 10 VARIA+ MULTIPLE PAIRED AND INDEPENDENT T-TE    OVERJE-   -MPI
CMPUTE AN ANALY+BMD07V, MULTIPLE RANGE TESTS--A PROGRAM TO C    DIXOWJ-   -BVM
.=                    A MULTIPLE REGRESSION ANALYSIS PROGRAM    MEDICO-   -MRA
, XRAP.=   EXPERIMENTAL MULTIPLE REGRESSION ANALYSIS PROGRAM    SHUMKE-   -EMR
           A GROUP MULTIPLE REGRESSION ANALYSIS.=             MEDICO-   -GMR
                        MULTIPLE REGRESSION ANALYSIS.=          STEIFE-   -MRA
02 FORTRAN SUBROUTINE-- MULTIPLE REGRESSION AND CORR.=+UCM F    MEIEP -16-GUF
A PROGRAM THAT PERFORMS MULTIPLE REGRESSION AND CORRELATION     DIXOWJ-   -BRM
ANALYSIS +   G2-UCM-FO2 MULTIPLE REGRESSION AND CORRELATION     MEIEP -19-GUF
ANALYSIS.=    G2 UCM FO2 MULTIPLE REGRESSION AND CORRELATION    MEIEP -20-GUF
).=      G2-UCM-FO2 MULTIPLE REGRESSION NO3 (MODIFIED 06        MEIEP -18-GUF
          A STEPWISE MULTIPLE REGRESSION PROGRAM.=             MARTCH-   -SMR
                        MULTIPLE REGRESSION PROGRAM.=           OVERJE-   -MRP
           1MPO12--A MULTIPLE REGRESSION PROGRAM.=             STERT -   -MMR
ATIONS, A PROGR+BMD03R, MULTIPLE REGRESSION WITH CASE COMBIN    DIXOWJ-   -BRM
IONS.= KSL 2.20, K-14-- MULTIPLE REGRESSION WITH TRANSFORMAT    DICKKW-   -KKM
   G2-NIH-NIH014G-- MULTIPLE REGRESSION.=                     DEPTHE-24-GNN
      OF PARSIMONY IN MULTIPLE REGRESSION.=                   DEPTHE-25-GNN
         G2 HED FO2 MULTIPLE REGRESSION.=                     MEIEP -08-GHF
   G2 UCM FO2 STEPWISE MULTIPLE REGRESSION.=                   MEIEP -15-GUF
OR INTERCORRELATION AND MULTIPLE REGRESSION.=    A PROGRAM F    JENNE -   -PIM
CN ANALYSIS AND GENERAL MULTIPLE REGRESSION.=+ FOR CORRELATI    HOFFPJ-   -PCA
            A MULTIPLE SCALOGRAM ANALYSIS.=                   LINGJC-   -MSA
                        MULTIPLE SCALOGRAM ANALYSIS.=           LINGJC-,  -MSA
CORRELATION ANALYSIS OF MULTIPLE TIME SERIES.    + AND CROSS    OVERJE-   -ACC
ENT PROGRAM (SIMPLE AND MULTIPLE).= + A CORRELATION COEFFICI    MASSFJ-   -XCC
   ROTOPLOT PROGRAM FOR MULTIPLE, SINGLE PLANE, VISUALLY        CATTRB-   -RPM
REAL AND COMPLEX MATRIX MULTIPLICATION.=      F1-HADM-NAMULT    DEPTHE-   -FHN
LUES-VECTORS AND MATRIX MULTIPLICATIONS.=       + EIGENVA       DEPTHE-04-FNN
ER OF CHANNELS + FACTOR MULTIPLIER--MULTIPLIES VARIABLE NUMB    OGBORE-   -FMM
         FACTOR MULTIPLIER, 7 COLUMN.=                        OGBORE-   -FMC
LS +FACTOR MULTIPLIER-- MULTIPLIES VARIABLE NUMBER OF CHANNE    OGBORE-   -FMM
   FLUX--A PROGRAM WHICH MULTIPLIES 400-CHANNEL OUTPUT BY A     OGBORE-   -CCP
   E1-HADM-NAINTP-- MULTIVARIATE LINEAR INTERPOLATION.=        DEPTHE-02-EHN
      UN 14, UN 36 MULTIVARIATE PREDICTION PROGRAMS.=          SCHAKW-   -UUM
      VECTCR PRODUCT MULTIVARIATE PROFILE CLASSIFICATION.      OVERJE-   -NVP
INEAR EQUATION Y EQUALS MX PLUS B.=    LEAST SQUARE. FINDS L    OGBORE-   -LSF
```

46

Contrails

```
    K INDEPENDENT TRIALS X N EVENTS (VARTING PROBABILITIES).=      FRAN  -  -TPK
                        AN N ORDINATE FOURIER ANALYSIS PRGM.=       MEDICO-  -NOF
       SOLUTION OF A SET OF N SIMULTANEOUS LINEAR EQUATIONS IN N    DEPTHE-09-FNN
    OUS LINEAR EQUATIONS IN N UNKNOWN.=+ OF A SET OF N SIMULTANE    DEPTHE-09-FNN
    POLYNOMIAL TC A SET OF N WEIGHTED POINTS.=+SQUARES FIT OF A     DICKKW-  -KKL
    NANTS OF REAL +F3-HADM- NADETR A PROGRAM TO EVALUATE DETERMI    DEPTHE-01-FHN
    ATION.=         E1-HADM- NAINTP--MULTIVARIATE LINEAR INTERPOL   DEPTHE-02-EHN
    MATRICES.=      F4-HADM- NAINVS INVERSION OF REAL OR COMPLEX    DEPTHE-02-FHN
    PLICATION.=     F1-HADM- NAMULT REAL AND COMPLEX MATRIX MULTI   DEPTHE-  -FHN
    OF A SAMPLE SUBJECT TO NATURAL CLUSTERING INTRACLASS CORREL     HOPKCG-  -VMS
    LATION, A PROG+E1-HADM- NBBIVA--LAGRANGIAN BIVARIATE INTERPO    DEPTHE-01-EHN
    RPOLATION +    E1-HADM-- NBINTR--TABLE LOOKUP AND LINEAR INTE   DEPTHE-  -EHN
    AR SQUARE MATR+F4-HADM- NBMATX INVERSION OF A REAL NONSINGUL    DEPTHE-03-FHN
    ND CORRELATICN ANALYSIS NC.=          + MULTIPLE REGRESSION A   MEIEP -19-GUF
    TRANSFORM A MATRIX INTO NEARLY A TRIANGULAR MATRIX BY SIMILA    DEPTHE-  -FNN
    TE THE DETERMINANT CF A NEARLY TRIANGULAR MATRIX.=+TO EVALUA    DEPTHE-08-FNN
    T POSITLVE AND SMALLEST NEGATIVE VALUES.=+EXTRACT THE LARGES    DICKKW-01-KPT
      DETERMINE ACTIVITY OF NEURON IRRADIATED SAMPLE FOR VARIABL    OGBORE-  -SAV
           CF A SAMPLE OR THE NEUTRON FLUX THAT THE SAMPLE WAS      OGBORE-  -SSA
         A PROGRAM TO COMPUTE NEW VARIABLES FOR CORRELATION INPUT.  DEPTHE-20-GNN
    OGRAM.=         F1-NIH- NIH 001F GENERAL MATRIX INVERSION PR    DEPTHE-12-FNN
    N PROGRAM.=          F1- NIH-NIH 001F GENERAL MATRIX INVERSIO   DEPTHE-12-FNN
    ION, STEPWISE METHO+G2- NIH-NIH009G--MULTIPLE LINEAR REGRESS    DEPTHE-21-GNN
    ION PROGRAM.=       G1- NIH-NIH001G A PRE-POST EDIT CORRELAT    DEPTHE-15-GNN
    X FOR PROFILE ANALY+F1- NIH-NIH002F--WITHIN COVARIANCE MATRI    DEPTHE-11-FNN
    S PROGRAM.=         G1- NIH-NIH002G-A PERCENTILE COMPUTATION    DEPTHE-27-GNN
    MATRIX MULTIPLICATI+F2- NIH-NIH003F EIGENVALUES-VECTORS AND     DEPTHE-04-FNN
    BULATIONS OF FREQUE+G1- NIH-NIH003G-TWO AND THREEWAY CROSSTA    DEPTHE-28-GNN
    MATRIX INTO NEARLY +F1- NIH-NIH004 A PROGRAM TO TRANSFORM A     DEPTHE-  -FNN
    E MAXIMUM LIKELIHOO+G1- NIH-NIH004G--A PROGRAM TO COMPUTE TH    DEPTHE-13-GNN
     OF LINEAR EQUATION+F1- NIH-NIH005 MATRIX INVERSION-SOLUTION    DEPTHE-02-FNN
     TO TEST RAW INPUT +G1- NIH-NIH005G-DATA SCREENING A PROGRAM    DEPTHE-29-GNN
    EIGENVECTORS FROM + F2- NIH-NIH007 A PROGRAM TO COMPUTE THE     DEPTHE-05-FNN
    REAL SYMMETRIC MATR+F2- NIH-NIH008 EIGENVALUES-VECTORS OF A     DEPTHE-06-FNN
                        G2- NIH-NIH008G A CORRELATION PROGRAM.=     DEPTHE-16-GNN
    NSYMMETRIC MATRIX.= F2- NIH-NIH010 EIGENVALUES-VECTORS OF NO    DEPTHE-07-FNN
     PROGRAM TO CCMPUTE+G2- NIH-NIH010G A CANONICAL CORRELATIONS    DEPTHE-17-GNN
    DETERMINANT CF A + F3- NIH-NIH011 A PROGRAM TO EVALUATE THE     DEPTHE-C8-FNN
    PROGRAM.=           G2- NIH-NIH011G A DISCRIMINANT FUNCTION     DEPTHE-18-GNN
                        F1- NIH-NIH012 MATRIX INVERSION.=          DEPTHE-03-FNN
    RAM TC SELECT FOR + G2- NIH-NIH012G--A PREDICTED VALUES PROG    DEPTHE-23-GNN
    TOR SCLUTION CF A + F4- NIH-NIH013 A PROGRAM TO OBTAIN A VEC    DEPTHE-09-FNN
     MINIMUM NUMBER OF +G2- NLH-NIH013G--A PROGRAM TO SELECT THE    DEPTHE-22-GNN
    IX EQUATION BY THE +F4- NIH-NIH014 SOLUTION OF A LINEAR MATR    DEPTHE-10-FNN
                        G2- NIH-NIH014G--MULTIPLE REGRESSION.=      DEPTHE-24-GNN
    A CHI-SQUARE DEVIAT+G5- NLH-NIH015-A SUBROUTINE TO GENERATE     DEPTHE-04-GNN
     PRINCIPLE COMPONEN+G2- NLH-NIH015G-- A PROGRAM TO PERFORM A    DEPTHE-  -GNN
    IOUS STATISTICS +   G6- NIH-NIH017G A PROGRAM TO COMPUTE VAR    DEPTHE-14-GNN
    ARIANCE PROGRAM.=   G4- NIH-NIH018G--A ONE WAY ANALYSIS OF V    DEPTHE-12-GNN
    INATE AND/OR AREA + G6- NIH-NIH019--A PROGRAM TO COMPUTE ORD    DEPTHE-07-GNN
    O PRINT MEANS, STAN+G2- NIH-NIH019G--A PROGRAM TO COMPUTE AN    DEPTHE-19-GNN
    ABLE LOOKUP OF THE +G6- NIH-NIH020--A PROGRAM TO PERFORM A T    DEPTHE-06-GNN
     LIKELIHOOD METHOD)+G2- NIH-NIH020G FACTOR ANALYSIS (MAXIMUM    DEPTHE-01-GNN
    IVIDUAL AND TCTAL + G6- NIH-NIH021--A PROGRAM TO COMPUTE IND    DEPTHE-05-GNN
```

47

```
ABSCISSA FROM THE +G6- NIH-NIH022--A PROGRAM TO COMPUTE THE     DEPTHE-08-GNN
R SOME SPECIFIC +    G2- NIH-NIH022G-A PROGRAM TO TEST WHETHE    DEPTHE-02-GNN
UP PROGRAM.=         G6- NIH-NIH023--A STUDENT'S T TABLE LOOK    DEPTHE-11-GNN
N MULTIPLE REGRESSI+G2- NIH-NIH023G-PRINCIPLE OF PARSIMONY I     DEPTHE-25-GNN
D ESTIMATE OF FACTO+G2- NIH-NIH024G LAWLEY MAXIMUM LIKELIHOO     DEPTHE-03-GNN
EANS.=               G2- NIH-NIH026G--T-TEST FOR CORRELATED M    DEPTHE-09-GNN
 VARIABLES FOR CORR+G2- NIH-NIH027G A PROGRAM TO COMPUTE NEW     DEPTHE-20-GNN
RAM TO COMPUTE THE +EA- NIH-NIH110--FOURIER ANALYSIS, A PROG     DEPTHE-  -ENN
LEX METHOD).=        H1- NIH-NIH119--LINEAR PROGRAMMING (SIMP    DEPTHE-  -HNN
 CHI-SQUARE OF THE +G6- NIH-NIH120--A PROGRAM TO COMPUTE THE     DEPTHE-10-GNN
PROGRAM.=            E2- NIH-NIH122--NONLINEAR LEAST SQUARES     DEPTHE-01-ENN
ORTHOGONAL POLYNOMI+G2- NIH-NIH147-POLYNOMIAL REGRESSION BY      DEPTHE-26-GNN
 STEPWISE METHO+G2-NIH- NIH009G--MULTIPLE LINEAR REGRESSION,     DEPTHE-21-GNN
PROGRAM.=        G1-NIH- NIH001G A PRE-POST EDIT CORRELATION     DEPTHE-15-GNN
R PROFILE ANALY+F1-NIH- NIH002F--WITHIN COVARIANCE MATRIX FO     DEPTHE-11-FNN
OGRAM.=          G1-NIH- NIH002G-A PERCENTILE COMPUTATIONS PR    DEPTHE-27-GNN
IX MULTIPLICATI+F2-NIH- NIH003F EIGENVALUES-VECTORS AND MATR     DEPTHE-04-FNN
TIONS OF FREQUE+G1-NIH- NIH003G-TWO AND THREEWAY CROSSTABULA     DEPTHE-28-GNN
IX INTO NEARLY +F1-NIH- NIH004 A PROGRAM TO TRANSFORM A MATR     DEPTHE-  -FNN
XIMUM LIKELIHOO+G1-NIH- NIH004G--A PROGRAM TO COMPUTE THE MA     DEPTHE-13-GNN
LINEAR EQUATION+F1-NIH- NIH005 MATRIX INVERSION-SOLUTION OF      DEPTHE-02-FNN
TEST RAW INPUT +G1-NIH- NIH005G-DATA SCREENING A PROGRAM TO      DEPTHE-29-GNN
NVECTORS FROM + F2-NIH- NIH007 A PROGRAM TO COMPUTE THE EIGE     DEPTHE-05-FNN
 SYMMETRIC MATR+F2-NIH- NIH008 EIGENVALUES-VECTORS OF A REAL     DEPTHE-06-FNN
                G2-NIH- NIH008G A CORRELATION PROGRAM.=          DEPTHE-16-GNN
METRIC MATRIX.= F2-NIH- NIH010 EIGENVALUES-VECTORS OF NONSYM     DEPTHE-07-FNN
GRAM TO COMPUTE+G2-NIH- NIH010G A CANONICAL CORRELATIONS PRO     DEPTHE-17-GNN
ERMINANT OF A + F3-NIH- NIH011 A PROGRAM TO EVALUATE THE DET     DEPTHE-08-FNN
RAM.=           G2-NIH- NIH011G A DISCRIMINANT FUNCTION PROG     DEPTHE-18-GNN
                F1-NIH- NIH012 MATRIX INVERSION.=               DEPTHE-03-FNN
TO SELECT FOR + G2-NIH- NIH012G--A PREDICTED VALUES PROGRAM      DEPTHE-23-GNN
SOLUTION OF A + F4-NIH- NIH013 A PROGRAM TO OBTAIN A VECTOR      DEPTHE-09-FNN
IMUM NUMBER OF +G2-NIH- NIH013G--A PROGRAM TO SELECT THE MIN     DEPTHE-22-GNN
QUATION BY THE +F4-NIH- NIH014 SOLUTION OF A LINEAR MATRIX E     DEPTHE-10-FNN
                G2-NIH- NIH014G--MULTIPLE REGRESSION.=          DEPTHE-24-GNN
I-SQUARE DEVIAT+G5-NIH- NIH015-A SUBROUTINE TO GENERATE A CH     DEPTHE-04-GNN
NCIPLE COMPONEN+G2-NIH- NIH015G-- A PROGRAM TO PERFORM A PRI     DEPTHE-  -GNN
 STATISTICS +   G6-NIH- NIH017G A PROGRAM TO COMPUTE VARIOUS     DEPTHE-14-GNN
NCE PROGRAM.=   G4-NIH- NIH018G--A ONE WAY ANALYSIS OF VARIA     DEPTHE-12-GNN
E AND/OR AREA + G6-NIH- NIH019--A PROGRAM TO COMPUTE ORDINAT     DEPTHE-07-GNN
INT MEANS, STAN+G2-NIH- NIH019G--A PROGRAM TO COMPUTE AND PR     DEPTHE-19-GNN
 LOOKUP OF THE +G6-NIH- NIH020--A PROGRAM TO PERFORM A TABLE     DEPTHE-06-GNN
ELIHOOD METHOD)+G2-NIH- NIH020G FACTOR ANALYSIS (MAXIMUM LIK     DEPTHE-01-GNN
UAL AND TOTAL + G6-NIH- NIH021--A PROGRAM TO COMPUTE INDIVID     DEPTHE-05-GNN
CISSA FROM THE +G6-NIH- NIH022--A PROGRAM TO COMPUTE THE ABS     DEPTHE-08-GNN
ME SPECIFIC +   G2-NIH- NIH022G-A PROGRAM TO TEST WHETHER SO     DEPTHE-02-GNN
ROGRAM.=        G6-NIH- NIH023--A STUDENT'S T TABLE LOOKUP P     DEPTHE-11-GNN
LTIPLE REGRESSI+G2-NIH- NIH023G-PRINCIPLE OF PARSIMONY IN MU     DEPTHE-25-GNN
TIMATE OF FACTO+G2-NIH- NIH024G LAWLEY MAXIMUM LIKELIHOOD ES     DEPTHE-03-GNN
.=              G2-NIH- NIH026G--T-TEST FOR CORRELATED MEANS     DEPTHE-09-GNN
IABLES FOR CORR+G2-NIH- NIH027G A PROGRAM TO COMPUTE NEW VAR     DEPTHE-20-GNN
TO COMPUTE THE +EA-NIH- NIH110--FOURIER ANALYSIS, A PROGRAM      DEPTHE-  -ENN
METHOD).=       H1-NIH- NIH119--LINEAR PROGRAMMING (SIMPLEX      DEPTHE-  -HNN
-SQUARE OF THE +G6-NIH- NIH120--A PROGRAM TO COMPUTE THE CHI     DEPTHE-10-GNN
```

48

```
               SAMPLES FROM A NORMAL DISTRIBUTION WITH SPECIFIED        DICKKW-01-KCS
                              NORMAL TABLE GENERATOR.=                  OGBORE-   -NTG
               A PROGRAM FOR NORMALIZED VARIMAX FACTOR ROTATION.=       BENDAW-   -PNV
R SOLUTIONS.=                 NORMALIZED VARIMAX ROTATION OF FACTO      OVERJE-   -NVR
TE PROFILE CLASSIFICAT+       NORMALIZED VECTOR PRODUCT MULTIVARIA      OVERJE-   -NVP
IX ANALYSIS OF VARIANCE NO1.=                        G4 UCM M          MEIEP -02-GUM
FO2 MULTIPLE REGRESSION NO3 (MODIFIED 06).=          G2-UCM-           MEIEP -18-GUF
          FOR THREE AREAS AND NTAPES--A PROGRAM WHICH COMPUTES         OGBORE-   -TST
        PROGRAM TO LIST THE NUMBER AND PERCENTS OF CASES OF A          MASSFJ-   -XHL
   SPECTRUM FROM VARIABLE NUMBER OF CASES.=+COMPUTE A STANDARD         OGBORE-   -POF
                 VARIABLE NUMBER OF CHANNELS BY A COMMON FACTO         OGBORE-   -FMM
   DISTRIBUTION GIVEN THE NUMBER OF DEGREES OF FREEDOM AND             SULZES-   -PCO
   DISTRIBUTION GIVEN THE NUMBER OF DEGREES OF FREEDOM AND             SULZES-01-PCO
   URIER SERIES AT A GIVEN NUMBER OF EQUALLY SPACED POINTS.=+FO        DEPTHE-   -ENN
       DATA INTO SPECIFIED NUMBER OF GROUPS BASED ON THE ORDER         DIXOWJ-02-BDD
      TO SELECT THE MINIMUM NUMBER OF INDEPENDENT VARIABLES TO         DEPTHE-22-GNN
    SYSTEM HAVING UNEQUAL NUMBER OF OBSERVATIONS IN THE CELLS.         STERT -01-MPD
   READ A GROUP OF SETS OF NUMBERS AND EXTRACT THE LARGEST             DICKKW-01-KPT
            DATA AND ITEM NUMBERS OR CASE NUMBERS TO IDENTIFY          DIXOWJ-01-BDD
       ITEM NUMBERS OR CASE NUMBERS TO IDENTIFY CASES HAVING           DIXOWJ-01-BDD
     TRAPEZOIDAL RULE FOR NUMERICAL EVALUATION OF THE INTEGRAL         CLEMWC-   -CFR
     FILON'S FORMULA FOR NUMERICAL EVALUATION OF THE INTEGRAL          CLEMWC-01-CFR
                          NUMERICAL TAXONOMY.=                         FLAKR -   -NT
ALYSIS USING EITHER THE OBLIMAX OR VERIMAX CRITERION.=  + AN           BRIDDA-   -SSA
.=    A PROGRAM FOR THE OBLIMAX ROTATION TO SIMPLE STRUCTURE           NICKMR-   -POR
  CLASSIFICATION, SINGLE OBSERVATION.=          TWO VARIABLES OF       MCMACA-   -TVC
AVING UNEQUAL NUMBER OF OBSERVATIONS IN THE CELLS.=+SYSTEM H           STERT -01-MPD
ORRELATION PROGRAM WITH OBSERVATIONS MISSING CWOM.=       A C          VANDJM-   -CPO
           PAIRING OBSERVATIONS.=                                      MCMACA-   -PO
           A PROGRAM TO OBTAIN A VECTOR SOLUTION OF A SET              DEPTHE-09-FNN
   STANDARD-A PROGRAM TO OBTAIN COMPARABLY LOCATED AND DISPER          VELDDJ-   -SPO
PLE CORRELATION MATRIX, OMITTING UNDESIRED VARIABLES.=+A SIM           DIXOWJ-01-BDC
PUTE A STANDARD + PHASE ONE FLUX CORRECTED--A PROGRAM TO COM           OGBORE-   -POF
YING AN INDIVIDUAL INTO ONE OF SEVERAL GROUPS.= + OF CLASSIF           DIXOWJ-01-BMD
      THE HYPOTHESIS THAT ONE OF TWO RANDOM VARIABLES IS STOCH         STERT -   -MMT
DEPENDENT VARIABLE AND ONE OR MORE INDEPENDENT VARIABLES.=            DIXOWJ-   -BRS
      AND PATTERNS OF ANY ONE PARTICULAR SPECIFIED CODE IN             DIXOWJ-   -BDD
   SPECIFIED INTERVALS OF ONE VARIABLE AND COMPUTE SIMPLE              DIXOWJ-03-BDD
   OF VARIANCE TABLE, FOR ONE VARIABLE OF CLASSIFICATION,              DIXOWJ-   -BVM
.=   G4-NIH-NIH018G--A ONE WAY ANALYSIS OF VARIANCE PROGRAM            DEPTHE-12-GNN
THAT COMPUTES+IMP005-- ONE WAY ANALYSIS OF VARIANCE PROGRAM            STERT -   -MOW
=            XTAB11-- ONE WAY TABLES WITH HISTOGRAMS PLOT.             MASSFJ-   -XOW
THAT PRINTS PATTERNS OF ONE-COLUMN DATA AND ITEM NUMBERS OR           DIXOWJ-01-BDD
             TCHS1- ONE-FACTOR ANALYSIS OF VARIANCE.=                  FRAN  -   -TOF
          SIMPLE ONE-WAY ANALYSIS OF COVARIANCE.=                      OVERJE-   -SOW
                  ONE-WAY ANALYSIS OF VARIANCE.=                       OVERJE-   -OWA
    XTAB12--PAIRED ONE-WAY TABLES WITH HISTOGRAMS.=                    MASSFJ-   -XPO
   WHICH WILL PRINT ONLY THE HIGH AGREEMENTS PER PERSON.               DICKKW-   -KRA
ATION PROGR+A TAXONOMIC OPTIMIZATION PROCEDURE AND CLASSIFIC           LINGJC-   -TOP
OGRAM FOR THE DESIGN OF OPTIMUM MULTIFACTORIAL EXPERIMENTS.=           SMITWN-   -PDO
OF GROUPS BASED ON THE ORDER OF ENTRY OF THE DATA.=+ NUMBER            DIXOWJ-02-BDD
       KSL 2.30-HIGHER ORDER PARTIAL CORRELATIONS.=                    DICKKW-   -KHO
      VARIABLES IN ORDER TO PREDICT A DEPENDENT VARIABL                DEPTHE-23-GNN
         DATA AND RANK ORDERS EACH CASE BY THE SIZE OF                 DIXOWJ-   -BMR
```

```
           DATA AND RANK ORDERS EACH STANDARDIZED CASE BY        DIXOWJ-   -BMP
       PROGRAM TO COMPUTE ORDINATE AND/OR AREA OF TWO CLOSELY    DEPTHE-07-GNN
                    AN N ORDINATE FOURIER ANALYSIS PRGM.=        MEDICO-   -NOF
          TO CALCULATE THE ORDINATE OF STUDENT'S T DISTRIBUTION  SULZES-01-PCO
          TO CALCULATE THE ORDINATE OF THE CHI-SQUARED DISTRIBU  SULZES-   -PCO
   CR NO 2 'SINGLE CRYSTAL ORIENTER (GENIOSTAT) COORDINATES'.=   PATTAL-01-INS
                      .=  AN ORTHOGONAL FACTOR SIMILARITY PROGRAM BENDAW-   -OFS
       TO FIND BEST FITTING ORTHOGONAL FACTORS FOR A GIVEN HYPOT  SAUNDR-   -PFB
                       .=  ORTHOGONAL POLYNOMIAL TREND ANALYSIS   OVERJE-   -OPT
           REGRESSION BY ORTHOGONAL POLYNOMIALS.=               DEPTHE-26-GNN
   MPONENT SOLUTION AND AN ORTHOGONAL ROTATION.=+A PRINCIPAL CO   DIXOWJ-   -BMG
   XIS FACTOR ANALYSIS (C) ORTHOGONAL VARIMAX ROTATION.=    + A   VELDDJ-   -FPP
   FIES GIVEN VARIABLES BY OTHER VARIABLES.=    + CROSS- CLASSI   SAKOJM-   -XGC
   TICALLY LARGER THAN THE OTHER.=+ RANDOM VARIABLES IS STOCHAS   STERT -   -MMT
   MULTIPLIES 400-CHANNEL OUTPUT BY A FACTOR AND SUMS SELECTED    OGBORE-   -CCP
   GROUND FROM 400 CHANNEL OUTPUT.= + SUBTRACTS EXPERIMENT BACK   OGBORE-   -BSP
      A LINEAR FUNCTION OF P VARIABLES MEASURED ON EACH INDIVID   DIXOWJ-   -BMD
   HE F +   CALCULATION OF P-VALUES FOR FISHER'S F TEST GIVEN T   SULZES-   -CPV
   CORRELATION + FACTOR--A PACKAGE PROGRAM TO PRODUCE (A) INTER   VELDDJ-   -FPP
   P TO 10 VARIAB+MULTIPLE PAIRED AND INDEPENDENT T-TESTS FOR U   OVERJE-   -MPI
      A BASIC PROGRAM FOR PAIRED COMPARISONS FROM BALANCED        GULLH -   -BPP
   CIENTS FOR ASYMMETRICAL PAIRED DATA GROUPINGS.= + THE COEFFI   STERT -   -MCC
   S.=          XTAB12-- PAIRED ONE-WAY TABLES WITH HISTOGRAM     MASSFJ-   -XPO
          ASSOCIATED WITH PAIRED VARIABLES OF UNEQUAL SAMPLE     DEPTHE-14-GNN
                         PAIRING OBSERVATIONS.=                  MCMACA-   -PO
   GRAM WHICH COMPUTES ALL PAIRWISE PEARSON-R CORR COEFF.=+ PRO   NICHHC-   -IPW
   -SQUARES SUM SOLVER AND PARAMETER SHIFTER'.=+ICR NO 7 'LEAST   PATTAL-01-INL
   RAM.=          A NON- PARAMETRIC STATISTICAL ANALYSIS PROG     DAMMRA-   -NPS
   IH-                  OF PARSIMONY IN MULTIPLE REGRESSION.=     DEPTHE-25-GNN
               PROBIT ANALYSIS PART I.=                         OGBORE-   -PAP
               PROBIT ANALYSIS PART II.=                        OGBORE-01-PAP
         GUTTMAN SCALE NO 2 PART 1 A PROGRAM THAT PERFORMS THE    DIXOWJ-02-BSG
       GUTTMAN SCALING NO 2 ( PART 1).=              GO UCM F02   MEIEP -28-GUF
         GUTTMAN SCALE NO 2 PART 2 THE PROGRAM THAT PERFORMS      DIXOWJ-03-BSG
       GUTTMAN SCALING NO 2 ( PART 2).=              GO UCM F02   MEIEP -02-GUF
         GUTTMAN SCALE NO 2 PART 3 THE PROGRAM THAT PERFORMS      DIXOWJ-04-BSG
       GUTTMAN SCALING NO 2 ( PART 3).=              GO UCM F02   MEIEP -03-GUF
      TO COMPUTE SPECIFIED PARTIAL CORRELATION COEFFICIENTS.=     FRAN  -01-TPC
      KSL 2.30-HIGHER ORDER PARTIAL CORRELATIONS.=              DICKKW-   -KHO
                         PARTIAL ITEM ANALYSIS.=                 WALKG -   -PIA
   CONCENTRATION OF SMALL PARTICLES OR MICROBES IN A SOLUTION    SULZES-   -PCC
   AND PATTERNS OF ANY ONE PARTICULAR SPECIFIED CODE IN INPUT     DIXOWJ-   -BDD
     WHETHER SOME SPECIFIC PATTERN OF LOADINGS FITS A GIVEN      DEPTHE-02-GNN
           ELECTROPHORETIC PATTERN.=                            OGBORE-   -EP
   TO FIND +  BMD10D, DATA PATTERNS FOR DICHOTOMIES--A PROGRAM   DIXOWJ-   -BDD
   M THAT +  BMD11D, DATA PATTERNS FOR POLYCHOTOMIES, A PROGRA    DIXOWJ-01-BDD
   TO FIND FREQUENCIES AND PATTERNS OF ANY ONE PARTICULAR SPECI   DIXOWJ-   -BDD
   A PROGRAM THAT PRINTS PATTERNS OF ONE-COLUMN DATA AND         DIXOWJ-01-BDD
   OMPUTES JOINT AGREEMENT PATTERNS.=+ FORM G, A PROGRAM THAT C   DICKKW-   -KAP
   CASES HAVING THESE DATA PATTERNS.=+CASE NUMBERS TO IDENTIFY    DIXOWJ-01-BDD
           G1 UCM F02 DATA PATTERNS-DICROTOMY.=                 MEIEP -23-GUF
           G1 UCM F02 DATA PATTERNS-POLYCHOTOMY.=               MEIEP -26-GUF
      KSL 2.93--AGREEMENT PATTERNS, FORM G, A PROGRAM THAT       DICKKW-   -KAP
      KSL 2.94--AGREEMENT PATTERNS, FORM H, THIS PROGRAM FINDS   DICKKW-01-KAP
```

51

53

```
          PROGRAM WHICH PREPARES MATRIX COEFFICIENTS AND           OGBORE-  -MCM
    ACCOUNT)--THE PROGRAM PREPARES YEAR TOTAL OF ACTIVITY PER       OGBORE-  -SSR
   BMDO4S, GUTTMAN SCALE PREPROCESSOR A PROGRAM THAT PERFORMS       DIXOWJ-  -BSG
               OF THE PRESENCE OF RADIOACTIVE ISOTOPES BY          CARLJP-  -IDP
RAM.=                  PRETAB LI-A FREQUENCY TABULATOR PROG         HARTD -   -PIF
A CANONICAL CORRELATION PRGM.=                                     SHUMKE-  -CCP
POWER SPECTRUM ANALYSIS PRGM.=                              A       MED CO-  -PSA
DINATE FOURIER ANALYSIS PRGM.=                        AN N OR      MEDICO-  -NOF
INE-URATE HYPOTHESIS IN PRIMARY GOUT.=            + OF THE GLYC    NUGECA-  -EGU
2 UCM FO2 REGRESSION ON PRIMARY PRINCIPAL COMPONENTS.=      G       U OFOF-01-GUF
COMPUTER PROGRAM TO AID PRIMARY PROTEIN STRUCTURE DETERMINAT       DAYHMO-  -CCP
                       PRINCIPAL AXES FACTOR ANALYSIS.=            OVERJE-  -PAF
      INTERCORRELATION (B) PRINCIPAL AXIS FACTOR ANALYSIS (C)      VELDDJ-  -FPP
   PROGRAM TO PERFORM A PRINCIPAL AXIS FACTOR ANALYSIS USING       BRIDDA-  -SSA
          A PROGRAM FOR PRINCIPAL AXIS FACTOR ANALYSIS.=           BENDAW-  -PPA
     FOR INTERCORRELATION PRINCIPAL AXIS FACTOR ANALYSIS,          VELDDJ-  -API
M THAT COMPUTES+BMDO1M, PRINCIPAL COMPONENT ANALYSIS, PROGRA       DIXOWJ-  -BMP
SIS PROGRAM.=        A PRINCIPAL COMPONENT AND FACTOR ANALY        STEIFE-  -PCF
ASE BY THE SIZE OF EACH PRINCIPAL COMPONENT SEPARATELY.= + C       DIXOWJ-  -BMP
PROGRAM THAT PERFORMS A PRINCIPAL COMPONENT SOLUTION AND AN        DIXOWJ-  -BMG
ASE BY THE SIZE OF EACH PRINCIPAL COMPONENT.=+ ORDERS EACH C       DIXOWJ-  -BMR
CORES).=     F2 HED FO2 PRINCIPAL COMPONENTS ANALYSIS (RAW S       MEIEP -03-FHF
R DISPER +   F2 HED FO2 PRINCIPAL COMPONENTS ANALYSIS CORR O       MEIEP -02-FHF
   PROGRAM THAT COMPUTES PRINCIPAL COMPONENTS OF STANDARDIZED      DIXOWJ-  -BMP
  PROGRAM TO COMPUTE THE PRINCIPAL COMPONENTS OF STANDARDIZED      DIXOWJ-  -BMR
2 REGRESSION ON PRIMARY PRINCIPAL COMPONENTS.=      G2 UCM FO       U OFOF-01-GUF
   BMDO2M, REGRESSION ON PRINCIPAL COMPONENTS, A PROGRAM TO        DIXOWJ-  -BMR
  A PROGRAM TO PERFORM A PRINCIPLE COMPONENT FACTOR ANALYSIS       DEPTHE-  -GNN
EGRESSI+G2-NIH-NIHO23G- PRINCIPLE OF PARSIMONY IN MULTIPLE R       DEPTHE-25-GNN
   THAT WILL CALCULATE AND PRINT A MATRIX OF AGREEMENT SCORES      DICKKW-  -KAS
  PROGRAM TO DEVELOP AND PRINT A SUMMARY TABLE FOR UNREPLICAT      STERT -   -MPD
  PROGRAM TO COMPUTE AND PRINT MEANS, STANDARD DEVIATIONS          DEPTHE-19-GNN
F, A PROGRAM WHICH WILL PRINT ONLY THE HIGH AGREEMENTS PER         DICKKW-  -KRA
           A PROGRAM THAT PRINTS PATTERNS OF ONE-COLUMN DATA       DIXOWJ-01-BDD
S X N EVENTS + TCHS 3-- PROBABILITIES OF K INDEPENDENT TRIAL       FRAN  -   -TPK
   GROUP MEMBERSHIP AND PROBABILITIES OF MEMBERSHIP IN EACH        VELDDJ-  -GPP
ALS X N EVENTS (VARTING PROBABILITIES).= + K INDEPENDENT TRI       FRAN  -   -TPK
A TABLE LOOKUP OF THE F PROBABILITY DENSITY FUNCTION.=             DEPTHE-06-GNN
   BAYESIAN CONDITIONAL PROBABILITY DIAGNOSTIC CLASSIFICATIO       OVERJE-  -BCP
OF TWO CLOSELY RELATED PROBABILITY FUNCTIONS.= + DERIVATIVE        DEPTHE-08-GNN
OF TWO CLOSELY RELATED PROBABILITY FUNCTIONS.=+ AND/OR AREA        DEPTHE-07-GNN
EXACT TEST TO TEST THE PROBABILITY OF THE FREQUENCIES IN           STERT -   -MFS
                       PROBABILITY.=                               OGBORE-  -P
              G2 UCM PROBIT ANALYSIS (DUMMY).=                     MEIEP -   -GUP
WITH A SINGLE TREATMEN+ PROBIT ANALYSIS OF QUANTAL BIOASSAY        SULZES-  -PAQ
                       PROBIT ANALYSIS PART I.=                    OGBORE-  -PAP
                       PROBIT ANALYSIS PART II.=                   OGBORE-01-PAP
TS.=                   PROBIT ANALYSIS WITH CONFIDENCE LIMI        MEDICO-  -PAC
DO35, BIOLOGICAL ASSAY- PROBIT ANALYSIS.=              BM          DIXOWJ-  -BBA
LOGARITHMIC PROGRAMMING PROBLEM.=            THE LINEAR            CLASRJ-  -LLP
    A PROGRAM TO SOLVE PROBLEMS IN SYMBOLIC LOGIC.=                HAGEPW-  -PSP
TAXONOMIC OPTIMIZATION PROCEDURE AND CLASSIFICATION PROGRAM        LINGJC-  -TOP
   OF THE PROPAGATION PROCESS OF STIMULI OVER HEART TISSUE         RHEIWC-  -MMP
          A PROCRUSTES PROGRAM.=                                   MILLCR-  -PP
```

54

```
      PACKAGE PROGRAM TO PRODUCE (A) INTERCORRELATION (B)        VELDDJ-   -FPP
    BICDBNT-A PROGRAM TO PRODUCE TABULATIONS AND SUMMARY          CARLJP-   -BPP
     ACTIVITY CF SAMPLE, PRODUCED AND DISPOSED WITH DETAIL        OGBORE-   -RCI
 S,+GLASCOR--THE PROGRAM PRODUCES DISCRIMINANT FUNCTION SCORE     VELDDJ-   -GPP
 A PROGRAM TO CALCULATE PRODUCT MOMENT CORRELATION COEFFICIE      SAKOJM-   -CPC
 =                      PRODUCT MOMENT CORRELATION MATRICES.      OVERJE-   -PMC
     UN-15, UN-16, UN-17 PRODUCT MOMENT CORRELATION PROGRAMS.     SCHAKW-   -UUU
 ICATI+NORMALIZED VECTOR PRODUCT MULTIVARIATE PROFILE CLASSIF     OVERJE-   -NVP
 E- COVAR+KSL 2.00, K-8- PRODUCT-MOMENT CORRELATIONS, VARIANC     DICKKW-   -KKP
   CORMAT--A PROGRAM FOR PRODUCT-MOMENT INTERCORRELATION          VELDDJ-   -CPP
  REACTOR CREATED ISOTOPE PRODUCTION AND DISPOSITION RECORD       OGBORE-   -RCI
     METHODS FCR HORMONE PRODUCTION RATE DETERMINATIONS.=         NUGECA-   -IDM
   COVARIANCE MATRIX FOR PROFILE ANALYSIS.=                       DEPTHE-11-FNN
 OR PRCDUCT MULTIVARIATE PROFILE CLASSIFICATION.=      + VECT     OVERJE-   -NVP
                        PROFILE CORRELATION CLASSIFICATION.=      OVERJE-   -PCC
 H1-NIH-NIH119--LINEAR  PROGRAMMING (SIMPLEX METHOD).=           DEPTHE-   -HNN
 THE LINEAR LCGARITHMIC PROGRAMMING PROBLEM.=                     CLASRJ-   -LLP
   KSL 4.80, M-15-LINEAR PROGRAMMING.=                            DICKKW-   -KML
 IC AND NONSYMMETR+USERS PROJECT 648-2--A PROGRAM FOR SYMMETR     DAS RS-   -UPP
          MODEL OF THE PROPAGATION PROCESS OF STIMULI OVER        RHEIWC-   -MMP
 A PROGRAM THAT ASSIGNS PROPER WEIGHT TO GIVEN DATA ON VARIA      DIXOWJ-01-BSG
 NALYSIS OF VARIANCE FOR PROPORTIONATE CELL FREQUENCIES.= + A     OVERJE-02-TWA
 NALYSIS OF VARIANCE FOR PROPORTIONATE CELL FREQUENCIES.= + A     OVERJE-01-TWA
  TO ESTIMATE RECESSIVE PROPORTIONS OF CHARACTERISTICS.=          CARLJP-   -RPE
 PROGRAM TO AID PRIMARY PROTEIN STRUCTURE DETERMINATION.=         DAYHMO-   -CCP
   CENTILE-A PROGRAM TO PROVIDE CONVERSION TABLES FOR RAW-SC      VELDDJ-01-CPP
    DISTAN-A PROGRAM TO PROVIDE INFORMATION CONCERNING THE        VELDDJ-   -DPP
        A PRCGRAM THAT PROVIDES A RELATIONSHIP BETWEEN A          DIXOWJ-   -BRS
 PROGRAM FOR SCALING OF PSYCHOLOGICAL INVENTORIES BY THE          BAKEFB-   -PSP
 SSION TRANSFORMATION OF PSYCHOPHYSIOLOGIC DATA.=+FOR A REGRE     WILLBJ-   -PRT
 FREQUENCY RESPONSE FROM PULSE TESTING DATA USING FILON'S         CLEMWC-01-CFR
 FREQUENCY RESPONSE FROM PULSE TESTING DATA USING THE TRAPEZO     CLEMWC-   -CFR
     FUNCTICNS FOR THE PURPOSE OF CLASSIFYING AN INDIVIDUAL       DIXOWJ-01-BMD
        ISOTOPES BY A QUALITATIVE ANALYSIS OF SAMPLES            CARLJP-   -IDP
  FREQUENCY ANALYSIS OF QUALITATIVE DATA WITH CHI-SQUARE          OVERJE-   -FAQ
     PROBIT ANALYSIS OF QUANTAL BIOASSAY WITH A SINGLE TREAT      SULZES-   -PAQ
 AM 1.=                 QUAP-4--QUESTIONNAIRE ANALYSIS PROGR      WHITJR-   -QQA
         VARIMAX AND QUARTIMAX ROTATIONS.=                        VANDSG-   -VQR
 ATTEMPTS TO ANSWER THE QUESTION 'WHAT ARE THE ESSENTIAL          VELDDJ-   -CPT
        QUAP-4-- QUESTIONNAIRE ANALYSIS PROGRAM 1.=               WHITJR-   -QQA
 S ALL PAIRWISE PEARSON- R CORR COEFF.=+PROGRAM WHICH COMPUTE     NICHHC-   -IPW
 CHI-SQUARE DEVIATE WITH R DEGREES OF FREEDOM.= + GENERATE A      DEPTHE-04-GNN
       ROUTINE R-19--AN INTERCORRELATION PROGRAM.=               NICHRC-   -RRI
                        RADIATION DISTRIBUTION OF IMPLANTS.=      POWEWE-   -RDI
 N AUTCMATION PRUGRAM OF RADIATION TREATMENT PLANNING.=     A     STERTD-   -APR
    CF THE PRESENCE OF RADIOACTIVE ISOTOPES BY A QUALITATIV       CARLJP-   -IDP
   CCMPOSITE SAMPLE OF RADIOACTIVITY BY FINDING CLEAR PEAK        OGBORE-01-MDS
       THAT CNE OF TWO RANDOM VARIABLES IS STOCHASTICALLY         STERT -   -MMT
 TAL DESIGNS BY MEANS OF RANDOMIZATION.=          + OF EXPERIMEN  BAKEFB-   -AED
 ANALY+BMD07V, MULTIPLE RANGE TESTS--A PROGRAM TO COMPUTE AN      DIXOWJ-   -BVM
 BUTICN, FREQUENCIES AND RANGES.=   + THE FORM OF THEIR DISTRI    DEPTHE-29-GNN
  STANDARDIZED DATA AND RANK ORDERS EACH CASE BY THE SIZE         DIXOWJ-   -BMR
  STANDARDIZED DATA AND RANK ORDERS EACH STANDARDIZED CASE        DIXOWJ-   -BMP
 ROGRAM WHICH+KSL 2.91-- RANKED AGREEMENT SCORES, FORM F, A P     DICKKW-   -KRA
```

```
                A RATER RELIABILITY PROGRAM.=                         BENDAW-   -RRP
  CYCLIC FLUCTUATIONS IN REPEATED MEASUREMENTS OF THE SAME            VELDDJ-   -APD
BLES OF CLASSIFICATION, REPEATED MEASUREMENTS.=      TWO VARIA        MCMACA-01-TVC
ALYSLS OF VARIANCE WITH REPEATED MEASURES.=      + FOR THE AN         HARTDL-   -PAV
  FOR UP TO 10 VARIABLES REPEATED OVER TIME.=         + T-TESTS       OVERJE-   -MPI
M FOR EVALUATION OF THE REPERTORY TEST.=            A PROGRA          HESSHF-   -PER
        OF VARIANCE FOR A REPLICATED TWO-DIMENSIONAL SYSTEM           STERT -01-MPD
      SUMMARY TABLE FOR REPLICATED 2 WAY ANALYSIS OF VARIANC          STERT -  -MPC
ALYSLS OF VARIANCE WITH REPLICATION AND MISSING DATA.=   + AN         STERT -01-MWA
RIANCE WITH AND WITHOUT REPLICATION.= + 3 WAY ANALYSIS OF VA          STERT -  -MWA
VE PROPORTIONS OF CHAR+ REPRIT-A PROGRAM TO ESTIMATE RECESSI          CARLJP-   -RPE
IBLIOGRAPHY WITH 1 TO 6 REQUIREMENTS FOR INCLUSION.=      + B         OGBORE-   -IRT
L OF THE HUMAN EXTERNAL RESPIRATORY SYSTEM.=           + MODE         DANTGB-   -MMH
    OF GUTTMAN SCALE NO 2 RESPONDENTS ARE RANKED BY THE CORNEL        DIXOWJ-03-BSG
  SOLUTION OF THE DOSAGE RESPONSE CURVE.=+ MAXIMUM LIKELIHOOD         DEPTHE-13-GNN
NG +COMPUTING FREQUENCY RESPONSE FROM PULSE TESTING DATA USI          CLEMWC-   -CFR
NG +COMPUTING FREQUENCY RESPONSE FROM PULSE TESTING DATA USI          CLEMWC-01-CFR
-SQUARE OF THE SHIFT IN RESPONSE FROM TIME 1 TO TIME 2.=+CHI          DEPTHE-10-GNN
SEQUENCES OF STIMULI OR RESPONSES.=+MEASURE REDUNDANCIES IN           BRAUML-   -SDA
PECIFIED ROW AND COLUMN RESTRICTIONS.=           + WHO MEET S         MASSFJ-01-XST
CASES MEETING SPECIFIED RESTRICTIONS.=   + PREPARES LISTS OF          MASSFJ-   -XLP
RD DESCRIPT+INFORMATION RETRIEVAL THIS PROGRAM SEARCHES 3-CA          OGBORE-   -IRT
CUND AS AN ALLIPSOID OF REVOLUTION'.=       + FOR A CRYSTAL GR        PATTAL-   -INA
AM TO CALCULATE AVERAGE RIDITS.=              A PROGR                 HOFFEP-   -PCA
  A PROGRAM FOR SQUARE ROOT FACTOR ANALYSIS.=                        LINGJC-   -PSR
              SQUARE ROOT MATRIX INVERSION.=                         OVERJE-   -SRM
3 GO UCM FO2 SUBROUTINE ROTATE (VARIMAX).=                           MEIEP -08-GUF
      ANALYSIS, VARIMAX ROTATION AND FACTOR SCORE COMPUTATIO         VELDDJ-   -API
.=   G3 HED FC2 VARIMAX ROTATION OF A FACTOR MATRIX (KAISER)         MEIEP -03-GHF
          GO UCM FO2 ROTATION OF A FACTOR MATRIX.=                   MEIEP -06-GUF
      NORMALIZED VARIMAX ROTATION OF FACTOR SOLUTIONS.=              OVERJE-   -NVR
   ANALYSIS AND VARIMAX ROTATION ON A CORRELATION MATRIX.=           DEPTHE-   -GNN
PROGRAM FOR THE OBLIMAX ROTATION TO SIMPLE STRUCTURE.=    A          NICKMR-   -POR
RMALIZED VARIMAX FACTOR ROTATION.=              A PROGRAM FOR NO      BENDAW-   -PNV
  (C) ORTHOGONAL VARIMAX ROTATION.=      + AXIS FACTOR ANALYSIS      VELDDJ-   -FPP
  PLANE, VISUALLY GUIDED ROTATION.=      + FOR MULTIPLE, SINGLE      CATTRB-   -RPM
AND FACTOR ANALYSIS AND ROTATION.= + ANALYSIS ITEM ANALYSIS          WOLFR -   -TPT
UTLON AND AN ORTHOGONAL ROTATION.=+A PRINCIPAL COMPONENT SOL         DIXOWJ-   -BMG
  VARIMAX AND QUARTIMAX ROTATIONS.=                                  VANDSG-   -VQR
E PLANE, VISUALLY + THE ROTOPLOT PROGRAM FOR MULTIPLE, SINGL         CATTRB-   -RPM
-TEST).=   STATISTICAL ROUTINE (MEAN, STANDARD DEVIATION, T          OGBORE-   -SRM
02 SIMPLE MISSING VALUE ROUTINE NO 3.=              G1 UCM F         MEIEP -27-GUF
OGRAM.=                 ROUTINE R-19--AN INTERCORRELATION PR         NICHRC-   -RRI
A ZERO CELL CORRELATION ROUTINE THAT COMPUTES CORR COEFF.=           SAKOJM-   -ZCZ
  FREQUENCY DISTRIBUTION ROUTINE.=   GCODE-GENERAL CODING AND        SAKOJM-   -GGC
ND LINEAR INTERPOLATION ROUTINE.=A              + LOOKUP A           DEPTHE-   -EHN
SSENBERG DATA REDUCTION ROUTINE'.=            ICR NO 12 'WEI         PATTAL-   -INW
    WHO MEET SPECIFIED ROW AND COLUMN RESTRICTIONS.=                 MASSFJ-01-XST
  USING THE TRAPEZOIDAL RULE FOR NUMERICAL EVALUATION OF             CLEMWC-   -CFR
TISTICAL EXTENSIONS FOR RUNCIBLE 1.=                    STA          CASEIN-   -SER
  OF THE+1MPO16--FISHER' S EXACT TEST TO TEST THE PROBABILITY        STERT -   -MFS
  A PROGRAM FOR FISHER' S F DISTRIBUTION.=                          HOLLC -   -PFS
OF P-VALUES FOR FISHER' S F TEST GIVEN THE F STATISTIC AND T         SULZES-   -CPV
    DATA USING FILON' S FORMULA FOR NUMERICAL EVALUATION O           CLEMWC-01-CFR
```

```
TO CALCULATE CC PETER'  S INDEX OF CURVILINEARITY.=+ PROGRAM    VANDSG-   -CPC
      ACCORDING TO BRAGG'  S LAW FOR THE ANALYSIS OF CRYSTAL ST   PARNBL-   -TFA
     ORDINATE OF STUDENT'  S T DISTRIBUTION GIVEN THE NUMBER OF   SULZES-01-PCO
-NIH-NIHO23--A STUDENT'  S T TABLE LOOKUP PROGRAM.=       G6      DEPTHE-11-GNN
             STUDENT'  S T-TEST.=                                PR LLI-   -SST
A PROGRAM FOR KENDALL'  S TAU.=                                  BECKSL-   -PKS
=              BARTLETT'  S TEST FOR HOMOGENEITY OF VARIANCES.    MCMACA-   -BST
 PERFORMANCE OF FISHER'  S TEST OR THE CLASSICAL CHI-SQUARED      SULZES-   -PFS
HE +  KSL 2.50--FISHER'  S Z TRANSFORMATION PROGRAM TO TEST T    DICKKW-   -KFS
   SPECIFIC ACTIVITY OR SAMPLE ACTIVITY OF A SAMPLE OR THE       OGBORE-   -SSA
        ACTIVITY, FLUX, SAMPLE ACTIVITY--THE PROGRAM DETERMI     OGBORE-   -SSA
 MPUTER PROGRAM TO DETE+ SAMPLE ACTIVITY--VARIABLE TIME--A CO    OGBORE-   -SAV
      AND COMPARES EACH SAMPLE AGAINST PLUS OR MINUS 2 SIGMA     OGBORE-   -TST
  OF NEURON IRRADIATED SAMPLE FOR VARIABLE IRRADIATION           OGBORE-   -SAV
THE VARI+COMPARISON OF SAMPLE MEAN AND POPULATION MEAN WHEN      MCMACA-   -CSM
     TO SOLVE COMPOSITE SAMPLE OF RADIOACTIVITY BY FINDING       OGBORE-01-MDS
OR SAMPLE ACTIVITY OF A SAMPLE OR THE NEUTRON FLUX THAT THE      OGBORE-   -SSA
ED VARIABLES CF UNEQUAL SAMPLE SIZE.=  + ASSOCIATED WITH PAIR    DEPTHE-14-GNN
   VARIANCE OF MEAN OF A SAMPLE SUBJECT TO NATURAL CLUSTERING    HOPKCG-   -VMS
E NEUTRON FLUX THAT THE SAMPLE WAS EXPOSED TO.=+SAMPLE OR TH     OGBORE-   -SSA
LOUT ACTIVITY IN AN AIR SAMPLE.=    + PROGRAM TO COMPUTE FAL     OGBORE-   -ABA
 --COMPUTES ACTIVITY OF SAMPLE, PRODUCED AND DISPOSED WITH       OGBORE-   -RCI
QUALITATIVE ANALYSIS OF SAMPLES (WATER, MILK ETC).=  + BY A      CARLJP-   -IDP
ITH +KSL 4.20-CONSTRUCT SAMPLES FROM A NORMAL DISTRIBUTION W     DICKKW-01-KCS
PROGRAM TO PERFORM A + SAS, STATISTICAL ANALYSIS SYSTEM--A       BRIDDA-   -SSA
      DETERMINES EITHER SATURATION, SPECIFIC ACTIVITY OR         OGBORE-   -SSA
  SAMPLE ACTIVITY--THE + SATURATION, SPECIFIC ACTIVITY, FLUX,    OGBORE-   -SSA
OPER +   BMD05S GUTTMAN SCALE NO 1 A PROGRAM THAT ASSIGNS PR     DIXOWJ-01-BSG
FORMS +  BMD06S GUTTMAN SCALE NO 2 PART 1 A PROGRAM THAT PER     DIXOWJ-02-BSG
ERFORMS +BMD07S GUTTMAN SCALE NO 2 PART 2 THE PROGRAM THAT P     DIXOWJ-03-BSG
ERFORMS +BMD08S GUTTMAN SCALE NO 2 PART 3 THE PROGRAM THAT P     DIXOWJ-04-BSG
COMPUTATIONS CF GUTTMAN SCALE NO 2 RESPONDENTS ARE RANKED        DIXOWJ-03-BSG
 FINAL STEPS CF GUTTMAN SCALE NO 2 SCORES ARE ASSIGNED.=+THE     DIXOWJ-04-BSG
ITIAL STEPS FCR GUTTMAN SCALE NO 2.=   + THAT PERFORMS THE IN    DIXOWJ-02-BSG
RFORMS +BMD04S, GUTTMAN SCALE PREPROCESSOR A PROGRAM THAT PE     DIXOWJ-   -BSG
S AND ASSIGNS A GUTTMAN SCALE SCORE FOR EACH CASE.=+THE CASE     DIXOWJ-01-BSG
ARIANCES IN LCGARITHMIC SCALE.=    + MEANS, STANDARD DEV, COV    DICKKW-   -KKC
       GO UCM FC2 GUTTMAN SCALING NO 1.=                         MEIEP -29-GUF
       GO UCM FC2 GUTTMAN SCALING NO 2 (PART 1).=                MEIEP -28-GUF
       GO UCM FC2 GUTTMAN SCALING NO 2 (PART 2).=                MEIEP -02-GUF
       GO UCM FC2 GUTTMAN SCALING NO 2 (PART 3).=                MEIEP -03-GUF
  BY THE + A PROGRAM FOR SCALING OF PSYCHOLOGICAL INVENTORIES    BAKEFB-   -PSP
          A MULTIPLE SCALOGRAM ANALYSIS.=                        LINGJC-   -MSA
           MULTIPLE SCALOGRAM ANALYSIS.=                         LINGJC-,  -MSA
           1MPO10-A SCATTER PROGRAM.=                            STERT -   -MSP
M COMPARISON CF MEANS ( SCHEFFE TEST).=            A PROGRA      SMITWN-   -PCM
  THE HIGHEST AGREEMENT SCORE AMONG ALL THE PERSONS OF A         DICKKW-01-KAP
MAX ROTATION AND FACTOR SCORE COMPUTATION.= + ANALYSIS, VARI     VELDDJ-   -API
        A SINGLE DIGIT SCORE CORRELATION PROGRAM.=              BENDAW-   -SDS
CN FRCM ANY SET OF RAW- SCORE DISTRIBUTION.=    + DISTRIBUTI     VELDDJ-   -SPO
VERSICN TABLES FOR RAW- SCORE DISTRIBUTIONS.=+TO PROVIDE CON     VELDDJ-01-CPP
ASSIGNS A GUTTMAN SCALE SCORE FOR EACH CASE.=+THE CASES AND      DIXOWJ-01-BSG
        A FACTOR SCORE PROGRAM.=                                 MILLC -   -FSP
T A MATRIX OF AGREEMENT SCORES AMONG A SET OF PERSONS.=+PRIN     DICKKW-   -KAS
```

59

```
             OF DIFFERENCE SCORES AND SUMS OF DIFFERENCE SCORES     SULZES-   -CDS
S OF GUTTMAN SCALE NO 2 SCORES ARE ASSIGNED.=+THE FINAL STEP        DIXOWJ-04-BSG
  AND SUMS OF DIFFERENCE SCORES ON THE MMPI.=          + SCORES     SULZES-   -CDS
ROGRAM TO TRANSFORM RAW SCORES TO STANDARD SCORES.=        + P      DICKKW-   -KPT
FOR CONVERTING MMPI RAW SCORES TO T-SCORES.=        + PROGRAM       LADDCE-   -CPC
  RAW SCORES TO STANDARD SCORES.=         + PROGRAM TO TRANSFORM    DICKKW-   -KPT
G MMPI RAW SCORES TO T- SCORES.=         + PROGRAM FOR CONVERTIN    LADDCE-   -CPC
ELD PREDICTED CRITERION SCORES.=     REGSCOR--A PROGRAM TO YI       VELDDJ-   -RPY
OMPONENTS ANALYSIS (RAW SCORES).=      F2 HED FO2 PRINCIPAL C       MEIEP -03-FHF
  DISCRIMINANT FUNCTION SCORES, CHI-SQUARES REGARDING GROUP         VELDDJ-   -GPP
    KSL 2.90+-AGREEMENT SCORES, FORM A, A PROGRAM THAT WILL         DICKKW-   -KAS
  2.91--RANKED AGREEMENT SCORES, FORM F, A PROGRAM WHICH            DICKKW-   -KRA
      A PROGRAM FOR TEST SCORING AND ITEM ANALYSIS.=               BAKEFD-   -PTS
     PROGRAM FOR TEST SCORING TEST ANALYSIS ITEM ANALYSIS           WOLFR -   -TPT
T + G1-NIH-NIH005G-DATA SCREENING A PROGRAM TO TEST RAW INPU        DEPTHE-29-GNN
         G1 UCM MIX DATA SCREENING NO 1.=                           MEIEP -13-GUM
         G1 UCM MIX DATA SCREENING NO 2.=                           MEIEP -14-GUM
         G1 UCM DATA SCREENING NO 3.=                               MEIEP -   -GUD
         G1 UCM MIX DATA SCREENING NO 4.=                           MEIEP -12-GUM
    (HL-LOW PROGRAM) A SCREENING PROGRAM TO LIST THE NUMBER         MASSFJ-   -XHL
  RETRIEVAL THIS PROGRAM SEARCHES 3-CARD DESCRIPTOR OF ARTICL       OGBORE-   -IRT
          THREE POINT SECOND DEGREE LAGRANGIAN POLYNOMIAL           DEPTHE-   -EHT
  MATRIX EQUATION BY THE SEIDEL METHOD.=+SOLUTION OF A LINEAR       DEPTHE-10-FNN
     VALUES PROGRAM TO SELECT FOR EACH VARIABLE SPECIFIED           DEPTHE-23-GNN
          PROGRAM TO SELECT THE MINIMUM NUMBER OF INDEPEN           DEPTHE-22-GNN
UT BY A FACTOR AND SUMS SELECTED AREAS.=   + 400-CHANNEL OUTP       OGBORE-   -CCP
  PERINATAL MORTALITY BY SELECTED GESTATIONAL AND DEMOGRAPHIC       CARLJP-   -PPA
      A PROGRAM FOR SELECTIVE CURVE SET.=                           WALKJR-   -PSC
                    SEMI-LOG LEAST SQUARE METHOD.=                  OGBORE-   -SLL
OF STRATA--A PROGRAM TO SEPARATE CASES INTO SPECIFIED INTERV        DIXOWJ-03-BDD
ACH PRINCIPAL COMPONENT SEPARATELY.= + CASE BY THE SIZE OF E        DIXOWJ-   -BMP
A PROGRAM TO COMPUTE A SEQUENCE OF MULTIPLE LINEAR REGRESSI         DIXOWJ-01-BRS
MEASURE REDUNDANCIES IN SEQUENCES OF STIMULI OR RESPONSES.=         BRAUML-   -SDA
MEASURE REDUNDANCIES + SEQUENTIAL DEPENDENCIES ANALYSIS TO          BRAUML-   -SDA
INFORMATION ANALYSIS OF SEQUENTIAL DEPENDENCIES.=       + FOR       MCKIJ -   -PIA
OGRAM FOR FACTORING + SEQUENTIAL DEPENDENCY ANALYSIS--A PR          LINGJC-   -SDA
TION AS ANALYZED BY THE SERIAL DILUTION METHOD.= + IN A SOLU        SULZES-   -PCC
=         MECHANIZED SERIAL RECORD FOR MEDICAL LIBRARIES.           FRANDR-   -MSR
  MEANS, COVARIANCES AND SERIAL TREND.=       + WITH SPECIFIED      DICKKW-01-KCS
         G3 UCM MIX TIME SERIES ANALYSIS NO 1.=                     MEIEP -01-GUM
         G3 UCM MIX TIME SERIES ANALYSIS NO 2.=                     MEIEP -   -GUM
  VALUES OF THE FOURIER SERIES AT A GIVEN NUMBER OF EQUALLY         DEPTHE-   -ENN
     A PROGRAM FOR TIME SERIES COMPONENTS ANALYSIS.=               SCHRND-   -PTS
OF SUBJECT GROUPS ON A SERIES OF DEPENDENT VARIABLES.=+ SET        VELDDJ-01-APD
IME +   FITTING FOURIER SERIES TO ANY PERIODIC FUNCTION OR T        SULZES-   -FFS
SQUARES A TRIGONOMETRIC SERIES UP TO THE NINTH HARMONIC.=          DIXOWJ-   -BRP
ALYSIS OF MULTIPLE TIME SERIES.    + AND CROSS CORRELATION AN       OVERJE-   -ACC
ENSITY ANALYSIS OF TIME SERIES.=              SPECTRAL D            OVERJE-   -SDA
RIODIC FUNCTION OR TIME SERIES.=   + FOURIER SERIES TO ANY PE       SULZES-   -FFS
  2.61--CHI-SQUARE FOR A SET OF FREQUENCY TABLES.=       KSL       DICKKW-   -KCS
A PROGRAM TO COMPUTE A SET OF LINEAR FUNCTIONS FOR THE             DIXOWJ-01-BMD
A VECTOR SOLUTION OF A SET OF N SIMULTANEOUS LINEAR EQUATIO        DEPTHE-09-FNN
IT OF A POLYNOMIAL TO A SET OF N WEIGHTED POINTS.=+SQUARES F        DICKKW-   -KKL
GREEMENT SCORES AMONG A SET OF PERSONS.=+PRINT A MATRIX OF A        DICKKW-   -KAS
```

61

```
ORDERS EACH CASE BY THE SIZE OF EACH PRINCIPAL COMPONENT.=           DIXOWJ-  -BMR
ABLES OF UNEQUAL SAMPLE SIZE.= + ASSOCIATED WITH PAIRED VARI         DEPTHE-14-GNN
ION, WITH UNEQUAL GROUP SIZES.=+ ONE VARIABLE OF CLASSIFICAT         DIXOWJ-  -BVM
       THE CONCENTRATION OF SMALL PARTICLES OR MICROBES IN A         SULZES-  -PCC
HE LARGEST POSITIVE AND SMALLEST NEGATIVE VALUES.=+EXTRACT T         DICKKW-01-KPT
          A PROGRAM FOR SOCIOMETRIC ANALYSIS.=                       LINGJC-  -PSA
   A PRINCIPAL COMPONENT SOLUTION AND AN ORTHOGONAL ROTATION.        DIXOWJ-  -BMG
        OR MICROBES IN A SOLUTION AS ANALYZED BY THE SERIAL          SULZES-  -PCC
  BY THE + F4-NIH-NIH014 SOLUTION OF A LINEAR MATRIX EQUATION        DEPTHE-10-FNN
       TO OBTAIN A VECTOR SOLUTION OF A SET OF N SIMULTANEOUS        DEPTHE-09-FNN
       MATRIX INVERSION- SOLUTION OF LINEAR EQUATIONS.=              DEPTHE-02-FNN
THE MAXIMUM LIKELIHOOD SOLUTION OF THE DOSAGE RESPONSE               DEPTHE-13-GNN
IMAX ROTATION OF FACTOR SOLUTIONS.=            NORMALIZED VAR         OVERJE-  -NVR
STRIPPING--A PROGRAM TO SOLVE COMPOSITE SAMPLE OF RADIOACTIV         OGBORE-01-MDS
         A PROGRAM TO SOLVE PROBLEMS IN SYMBOLIC LOGIC.=             HAGEPW-  -PSP
ADM-SHINVR A PROGRAM TO SOLVE SIMULTANEOUS EQUATIONS.=   F4-H        DEPTHE-  -FHS
 ANALYSIS--A PROGRAM TO SOLVE SIMULTANEOUS LINEAR EQUATIONS          OGBORE-  -EEA
NO 7 'LEAST-SQUARES SUM SOLVER AND PARAMETER SHIFTER'.=+ICR          PATTAL-01-INL
ED ON DISTANCES IN TEST SPACE.=       + GROUPING ANALYSIS BAS        VELDDJ-  -GPW
 DISCRIMINANT OR FACTOR SPACE.=  + CENTROIDS, DISPERSIONS IN         MEIEP -02-GHF
CE FITTING ON UNEQUALLY SPACED POINTS.=+ FOR CURVE AND SURFA         HOBBC -  -ISP
GIVEN NUMBER OF EQUALLY SPACED POINTS.=+FOURIER SERIES AT A          DEPTHE-  -ENN
HE PROGRAM PREPAR+STACY SPECIAL (REACTOR ISOTOPE ACCOUNT)--T         OGBORE-  -SSR
ATA EXCLUDING SPECIFIED SPECIAL VALUES.=         + OF INPUT D        DIXOWJ-02-BDC
     EITHER SATURATION, SPECIFIC ACTIVITY OR SAMPLE ACTIVITY         OGBORE-  -SSA
VITY--THE + SATURATION, SPECIFIC ACTIVITY, FLUX, SAMPLE ACTI         OGBORE-  -SSA
TO TEST WHETHER SOME SPECIFIC PATTERN OF LOADINGS FITS A             DEPTHE-02-GNN
OF ANY ONE PARTICULAR SPECIFIED CODE IN INPUT DATA.=                 DIXOWJ-  -BDD
      FOR EACH VARIABLE SPECIFIED INDEPENDENT VARIABLES IN           DEPTHE-23-GNN
TO SEPARATE CASES INTO SPECIFIED INTERVALS OF ONE VARIABLE           DIXOWJ-03-BDD
    DISTRIBUTION WITH SPECIFIED MEANS, COVARIANCES AND               DICKKW-01-KCS
     TO GROUP DATA INTO SPECIFIED NUMBER OF GROUPS BASED ON          DIXOWJ-02-BDD
7--A PROGRAM TO COMPUTE SPECIFIED PARTIAL CORRELATION COEFFI         FRAN  -01-TPC
 LISTS OF CASES MEETING SPECIFIED RESTRICTIONS.=   + PREPARES        MASSFJ-  -XLP
OF INDIVIDUALS WHO MEET SPECIFIED ROW AND COLUMN RESTRICTION         MASSFJ-01-XST
OF INPUT DATA EXCLUDING SPECIFIED SPECIAL VALUES.=                   DIXOWJ-02-BDC
INDIVIDUAL SPECTRA TO + SPECTRA ADDER--A PROGRAM WHICH ADDS          OGBORE-  -SAP
 WHICH ADDS INDIVIDUAL SPECTRA TO CREATE A THEORETICAL              OGBORE-  -SAP
UTOCOVARIANCE AND POWER SPECTRAL ANALYSIS.=        BMD02T A         DIXOWJ-01-BTA
ASM AUTOCORRELATION AND SPECTRAL ANALYSIS.=      G2-HADF-ACS        DEPTHE-  -GHA
                        SPECTRAL AND FOURIER ANALYSIS.=             ROSEG -  -SFA
RIES.=                  SPECTRAL DENSITY ANALYSIS OF TIME SE        OVERJE-  -SDA
           A POWER SPECTRAL DENSITY.=                               FINKM -  -PSD
   COMPUTER ANALYSIS OF SPECTROGRAPHIC DATA.=                       WILKT -  -CAS
          A POWER SPECTRUM ANALYSIS PRGM.=                          MED CO-  -PSA
   TO COMPUTE A STANDARD SPECTRUM FROM VARIABLE NUMBER OF           OGBORE-  -POF
A THEORETICAL COMPOSITE SPECTRUM.=        + SPECTRA TO CREATE       OGBORE-  -SAP
FE OF EACH CHANNEL OF A SPECTRUM.=       + TO COMPUTE HALF-LI       OGBORE-  -PTP
PROGRAM TO COMPUTE FOUR SQUARE DETERMINANTS.=             A         SULZES-  -PCF
    TO GENERATE A CHI- SQUARE DEVIATE WITH R DEGREES OF             DEPTHE-04-GNN
DIVIDUAL AND TOTAL CHI- SQUARE DISTRIBUTIONS.=+TO COMPUTE IN        DEPTHE-05-GNN
.=       KSL 2.61--CHI- SQUARE FOR A SET OF FREQUENCY TABLES        DICKKW-  -KCS
        KSL 2.60--CHI- SQUARE FOR DICHOTOMOUS DATA.=               DICKKW-02-KCS
    A PROGRAM FOR CHI- SQUARE FOR 2X2 CONTINGENCY TABLES,          DAS RS-  -PCS
```

```
N OF A REAL NONSINGULAR SQUARE MATRIX.=              + INVERSIO   DEPTHE-03-FHN
           SEMI-LOG LEAST SQUARE METHOD.=                          OGBORE-  -SLL
    TO COMPUTE THE CHI- SQUARE OF THE SHIFT IN RESPONSE            DEPTHE-10-GNN
      LCR NO 8 'LEAST- SQUARE PLANE PROGRAM'.=                     PATTAL-  -INL
         G1-UCM CHI- SQUARE PROGRAM.=                              BRUNRE-  -GUC
            A CHI- SQUARE PROGRAM.=                                GALLAB-  -CSP
          A LATIN SQUARE PROGRAM.=                                 MCMACA-  -LSP
      IMP007--A LATIN SQUARE PROGRAM.=                             STERT -  -MLS
          A PROGRAM FOR SQUARE ROOT FACTOR ANALYSIS.=              LINGJC-  -PSR
                    SQUARE ROOT MATRIX INVERSION.=                 OVERJE-  -SRM
    T-TEST, F-TEST, CHI- SQUARE TEST.=                             OGBORE-  -TTF
                    CHI- SQUARE TEST.=                             PR LLI-  -CST
LITATIVE DATA WITH CHI- SQUARE TESTS.=       + ANALYSIS OF QUA     OVERJE-  -FAQ
TO COMPUTE ALL 2X2 CHI- SQUARE VALUES OF A MATRIX OF DICHOTO       FRAN -   -TPC
TWO TABLES.=        CHI- SQUARE WITH YATES CORRECTION TWO-BY-      MCMACA-  -CSY
LS MX PLUS B.=   LEAST SQUARE. FINDS LINEAR EQUATION Y EQUA        OGBORE-  -LSF
1-UCM-F02--GENERAL CHI- SQUARE.=                            G      MEIEP -  -GUF
D THE VALUE OF THE CHI- SQUARE.=   + OF DEGREES OF FREEDOM AN      SULZES-  -PCO
ARD DEVIATIONS AND CHI- SQUARE.=+ COMPUTE FREQUENCIES, STAND       MASSFJ-01-XTW
N (WITH OR WITHOUT CHI- SQUARE).=             CROSS-TABULATIO      ROSEG -  -CTO
    ORDINATE OF THE CHI- SQUARED DISTRIBUTION GIVEN THE NUMBE      SULZES-  -PCO
  OR THE CLASSICAL CHI- SQUARED TEST ON A FOUR FOLDTABLE.=         SULZES-  -PFS
FER SIGNIFICANTLY (CHI- SQUARED).=+TWO OR MORE VARIANCES DIF       STERT -  -MQB
     THAT FITS BY LEAST SQUARES A TRIGONOMETRIC SERIES UP          DIXOWJ-  -BRP
FOLNT.=             LEAST SQUARES APPROXIMATION WITH FLOATING      PR LLI-  -LSA
       COFIT, A LEAST SQUARES COSINE FITTING PROGRAM.=             ANDEBL-  -CLS
  KSL 4.40, K-3--A LEAST SQUARES FIT OF A POLYNOMIAL TO A          DICKKW-  -KKL
            LEAST SQUARES FIT TO RELAXATION EQUATION.=             CISLPJ-  -LSF
R CURVE FITTING.= LEAST SQUARES LINEAR, EXPONENTIAL AND POWE       OVERJE-  -LSL
E2-HADF-POLFCTP--LEAST SQUARES POLYNOMIAL FIT.=                    DEPTHE-  -EHP
NIH122--NONLINEAR LEAST SQUARES PROGRAM.=            E2-NIH-       DEPTHE-01-ENN
  FUNCTION SCORES, CHI- SQUARES REGARDING GROUP MEMBERSHIP         VELDDJ-  -GPP
CTOR PROGRAM AND LEAST- SQUARES SUM MAKER'.=+4 'STRUCTURE FA       PATTAL-  -INS
FTER'.+LCR NO 7 'LEAST- SQUARES SUM SOLVER AND PARAMETER SHI       PATTAL-01-INL
N BY CRITERION OF LEAST SQUARES.=         NON-LINEAR REGRESSIO     BEJAGG-  -NLR
PERCENTAGE TABLES, CHI- SQUARES, CONTINGENCY COEFFICIENTS          DIXOWJ-  -BSC
        WITH VARIABLE STACKING--A PROGRAM TO COMPUTE TWO-W         DIXOWJ-03-BDC
NT)--THE PROGRAM PREPA+ STACY SPECIAL (REACTOR ISOTOPE ACCOU       OGBORE-  -SSR
         MEANS, STANDARD DEV, COVARIANCES IN LOGARIT              DICKKW-  -KKC
TO COMPUTE THE MEAN AND STANDARD DEVIATION OF SEVERAL VARIAB       STERT -01-MPC
-F02, WEIGHTED MEAN AND STANDARD DEVIATION.=          GO-UOC       MEIEP -01-GUF
-F02, WEIGHTED MEAN AND STANDARD DEVIATION.=          GO-UOC       MEIEP -13-GUF
  WHICH COMPUTES MEAN, STANDARD DEVIATION, AND COMPARES            OGBORE-  -TST
TISTICAL ROUTINE (MEAN, STANDARD DEVIATION, T-TEST).=     STA      OGBORE-  -SRM
TO COMPUTE FREQUENCIES, STANDARD DEVIATIONS AND CHI-SQUARE.=       MASSFJ-01-XTW
      AND PRINT MEANS, STANDARD DEVIATIONS AND THE INTER-CO        DEPTHE-19-GNN
 PROGRAM FOR MEANS AND STANDARD DEVIATIONS FROM SINGLE             OGBORE-  -PMS
TRANSFORM RAW SCORES TO STANDARD SCORES.=        + PROGRAM TO      DICKKW-  -KPT
   PROGRAM TO COMPUTE A STANDARD SPECTRUM FROM VARIABLE            OGBORE-  -POF
BLY LOCATED AND DISPER+ STANDARD-A PROGRAM TO OBTAIN COMPARA       VELDDJ-  -SPO
  AND RANK ORDERS EACH STANDARDIZED CASE BY THE SIZE OF            DIXOWJ-  -BMP
PRINCIPAL COMPONENTS OF STANDARDIZED DATA AND RANK ORDERS          DIXOWJ-  -BMP
PRINCIPAL COMPONENTS OF STANDARDIZED DATA AND RANK ORDERS          DIXOWJ-  -BMR
                    STAT.=                                         VELDDJ-  -S
```

63

```
            3 GO UCM FO2 SUBROUTINE ROTATE (VARIMAX).=              MEIEP -08-GUF
DEVIATE+G5-NIH-NIHO15-A SUBROUTINE TO GENERATE A CHI-SQUARE         DEPTHE-04-GNN
  NON-LINEAR REGRESSION SUBROUTINE.=                               BALLWE- -NLR
           G2 UCM FC2 FORTRAN SUBROUTINE--MULTIPLE REGRESSION AND   MEIEP -16-GUF
YSIS ON THE DATA WITHIN SUBSAMPLES OF POPULATION.=     + ANAL      DIXOWJ-  -BRM
EXPERIMENT + BACKGROUND SUBTRACT--A PROGRAM WHICH SUBTRACTS         OGBORE-  -BSP
        PROGRAM WHICH SUBTRACTS EXPERIMENT BACKGROUND              OGBORE-  -BSP
OGRAM AND LEAST-SQUARES SUM MAKER'.=+ 4 'STRUCTURE FACTOR PR        PATTAL-  -INS
ICR NO 7 'LEAST-SQUARES SUM SOLVER AND PARAMETER SHIFTER'.=         PATTAL-01-INL
OR ALL + TABSM-A TABLE SUMMARY PROGRAM WHICH MAKES TABLES F         SAKOJM-  -TTS
PRODUCE TABULATIONS AND SUMMARY STATISTICS FROM DENTAL EPIDE        CARLJP-  -BPP
      PROGRAM TO COMPUTE SUMMARY TABLE FOR REPLICATED 2 WAY         STERT -   -MPC
  TO DEVELOP AND PRINT A SUMMARY TABLE FOR UNREPLICATED 2           STERT -   -MPD
NTS OF INDIVIDU+XTAB32, SUMMARY TABLES PROGRAM 2 TO GIVE COU        MASSFJ-01-XST
           XTAB31, SUMMARY TABLES 1.=                              MASSFJ-  -XST
TWO DIMENSIONAL FOURIER SUMMATION PROGRAM'.= + 1 'THREE AND        PATTAL-  -INT
  DIFFERENCE SCORES AND SUMS OF DIFFERENCE SCORES ON THE            SULZES-  -CDS
  OUTPUT BY A FACTOR AND SUMS SELECTED AREAS.=   + 400-CHANNEL      OGBORE-  -CCP
    CONVERTER AND PEAK SUMS WITH FLUX--A PROGRAM WHICH             OGBORE-  -CCP
PROGRAMS FOR CURVE AND SURFACE FITTING ON UNEQUALLY SPACED          HOBBC -   -ISP
      ACTUARIAL SURVIVAL RATE COMPUTATION.=                        PARNBL-  -ASR
BMDO1S, LIFE TABLE AND SURVIVAL RATE PROGRAM.=                     DIXOWJ-  -BSL
UCM FO2 LIFE TABLE AND SURVIVAL RATE.=                    GO        U OFOF-  -GUF
        GO-UOC-BIN SURVIVAL TABLES (ACTUARIAL METHOD).=             MEIEP -   -GUB
        GO UOC FO2 SURVIVAL TABLES (ACTUARIAL METHOD).=            MEIEP -09-GUF
  THE LINEARITY OF +   A SWAC REGRESSION PROGRAM WHICH CHECKS       LEVOE -   -SRP
AM TO SOLVE PROBLEMS IN SYMBOLIC LOGIC.=             A PROGR        HAGEPW-  -PSP
S AND VECTORS OF A REAL SYMMETERIC MATRIX.= + FO2 EIGENVALUE        MEIEP -   -FHF
  648-2--A PROGRAM FOR SYMMETRIC AND NONSYMMETRIC CORRELATI         DAS RS-  -UPP
      OF A REAL SYMMETRIC MATRIX BY THE JACOBI METHO               DEPTHE-06-FNN
      TWO-DIMENSIONAL SYSTEM HAVING UNEQUAL NUMBER OF             STERT -01-MPD
ACTOR ANALYSIS.= MAPS A SYSTEM OF INTERRELATED PROGRAM FOR F        WEXLJD-  -MSI
AN EXTERNAL RESPIRATORY SYSTEM.=             + MODEL OF THE HUM     DANTGB-  -MMH
ROGRAM FOR A MULTIGROUP SYSTEM.=   + ANALYSIS OF COVARIANCE P       STERT -   -MAC
   STATISTICAL ANALYSIS SYSTEM--A PROGRAM TO PERFORM A PRINC        BRIDDA-  -SSA
  ORDINATE OF STUDENT'S T DISTRIBUTION GIVEN THE NUMBER OF D        SULZES-01-PCO
NIH-NIHO23--A STUDENT'S T TABLE LOOKUP PROGRAM.=        G6-         DEPTHE-11-GNN
REEDOM AND THE VALUE OF T.=+GIVEN THE NUMBER OF DEGREES OF F        SULZES-01-PCO
HE VARIANCE IS UNKNOWN, T-DISTRIBUTION.=       + MEAN WHEN T        MCMACA-  -CSM
TING MMPI RAW SCORES TO T-SCORES.=      + PROGRAM FOR CONVER        LADDCE-  -CPC
      G2-NIH-NIHO26G-- T-TEST FOR CORRELATED MEANS.=              DEPTHE-09-GNN
S.=             A T-TEST PROGRAM FOR INDEPENDENT GROUP              BENDAW-  -TTP
HE DIFFERENCE BETWEEN + T-TEST TO TEST THE SIGNIFICANCE OF T        STERT -   -TTT
T PLOTS A HISTOGRAM OF+ T-TEST WITH HISTOGRAM--A PROGRAM THA        NICHHC-10-TTH
      STUDENT T-TEST.=                                     OVERJE-  -STT
      STUDENT'S T-TEST.=                                   PR LLI-  -SST
LINEAR FIT PROGRAM WITH T-TEST.=             1MP004 A            STERT -   -MLF
AN, STANDARD DEVIATION, T-TEST).=     STATISTICAL ROUTINE (ME       OGBORE-  -SRM
      T-TEST, F-TEST, CHI-SQUARE TEST.=                   OGBORE-  -TTF
 PAIRED AND INDEPENDENT T-TESTS FOR UP TO 10 VARIABLES REPEA        OVERJE-  -MPI
ES.=     VESUVIUS/LIFE- TAB-A PROGRAM TO ANALYZE DENTAL CARI        CARLJP-  -VLT
REQUENCY TABLES + CROSS TAB, A PROGRAM DESIGNED TO COMPUTE F        MERRHH-  -CTP
  BMD02S, CONTINGENCY TABLE ANALYSIS, PROGRAM TO COMPUTE          DIXOWJ-  -BSC
  BMD01S, LIFE TABLE AND SURVIVAL RATE PROGRAM.=                  DIXOWJ-  -BSL
```

```
         GO UCM F02 LIFE TABLE AND SURVIVAL RATE.=             U OFOF-   -GUF
         TO COMPUTE SUMMARY TABLE FOR REPLICATED 2 WAY ANALYSIS  STERT -   -MPC
        AND PRINT A SUMMARY TABLE FOR UNREPLICATED 2 WAY ANALYSI  STERT -   -MPD
                 NORMAL TABLE GENERATOR.=                      OGBORE-   -NTG
 N +   E1-HADM--NBINTR--  TABLE LOOKUP AND LINEAR INTERPOLATIO  DEPTHE-   -EHN
   PROGRAM TO PERFORM A TABLE LOOKUP OF THE F PROBABILITY      DEPTHE-06-GNN
 H-NIH023--A STUDENT'S T TABLE LOOKUP PROGRAM.=        G6-NI   DEPTHE-11-GNN
 BLES FOR ALL +  TABSM-A TABLE SUMMARY PROGRAM WHICH MAKES TA  SAKOJM-   -TTS
 AN ANALYSIS OF VARIANCE TABLE, FOR ONE VARIABLE OF CLASSIFIC  DIXOWJ-   -BVM
    GC-UOC-BIN SURVIVAL TABLES (ACTUARIAL METHOD).=           MEIEP -   -GUB
    GC UOC F02 SURVIVAL TABLES (ACTUARIAL METHOD).=           MEIEP -09-GUF
    TO COMPUTE FREQUENCY TABLES AND BASIC STATISTICS ON DATA  MERRHH-   -CTP
     PROGRAM WHICH MAKES TABLES FOR ALL POSSIBLE COMBINATIONS  SAKOJM-   -TTS
 M TO PROVIDE CONVERSION TABLES FOR RAW-SCORE DISTRIBUTIONS.=  VELDDJ-01-CPP
 UENCIES+XTAB22--TWO-WAY TABLES II--A PROGRAM TO COMPUTE FREQ  MASSFJ-01-XTW
 MPUTE TWO-WAY FREQUENCY TABLES OF DATA INPUT.=+PROGRAM TO CO  DIXOWJ-03-BDC
 NDIVIDU+XTAB32, SUMMARY TABLES PROGRAM 2 TO GIVE COUNTS OF I  MASSFJ-01-XST
 A CROSS CLASSIFICATION TABLES PROGRAM.=              XTAB61,  MASSFJ-01-XCC
         XTAB11--ONE WAY TABLES WITH HISTOGRAMS PLOT.=         MASSFJ-   -XOW
 XTAB12--PAIRED ONE-WAY TABLES WITH HISTOGRAMS.=              MASSFJ-   -XPO
      XTAB21--TWO-WAY TABLES 1.=                              MASSFJ-   -XTW
      XTAB31, SUMMARY TABLES 1.=                              MASSFJ-   -XST
   A PROGRAM FOR A-FOLD TABLES.=                              MILLCR-   -PFT
 HAT GENERATES FREQUENCY TABLES.=           1MP014-A PROGRAM T  STERT -02-MPT
 S CORRECTION TWO-BY-TWO TABLES.=        CHI-SQUARE WITH YATE  MCMACA-   -CSY
  FOR A SET OF FREQUENCY TABLES.=        KSL 2.61--CHI-SQUARE  DICKKW-   -KCS
           AND PERCENTAGE TABLES, CHI-SQUARES, CONTINGENCY     DIXOWJ-   -BSC
    FOR 2X2 CONTINGENCY TABLES, CORRECTED FOR CONTINUITY.=    DAS RS-   -PCS
 MAKES TABLES FOR ALL +  TABSM-A TABLE SUMMARY PROGRAM WHICH  SAKOJM-   -TTS
 ROSS CLASSIFICATION AND TABULATING PROGRAM.=     A GENERAL C  BONARR-   -GCC
 RE).=          CROSS- TABULATION (WITH OR WITHOUT CHI-SQUA   ROSEG -   -CTO
      G1 UCM F02 CROSS TABULATION NO 1.=                      MEIEP -24-GUF
      G1 UCM F02 CROSS TABULATION NO 2.=                      MEIEP -22-GUF
      G1 UCM F02 CROSS TABULATION NO 3 (MODIFIED 23).=        MEIEP -21-GUF
 PROGRAM +BMDO8D, CROSS TABULATION WITH VARIABLE STACKING--A  DIXOWJ-03-BDC
 AM TO +  BMDO9D, CROSS TABULATION, INCOMPLETE DATA--A PROGR  DIXOWJ-02-BDC
     PROGRAM TO PRODUCE TABULATIONS AND SUMMARY STATISTICS    CARLJP-   -BPP
        TO PERFORM CROSS TABULATIONS OF INPUT DATA EXCLUDING  DIXOWJ-02-BDC
 PRETAB II-A FREQUENCY TABULATOR PROGRAM.=                    HARTD -   -PIF
 ICR NO 6 'FOURIER DATA TAPE MAKER'.=                         PATTAL-   -INF
 ANY FORMAT CN CARDS OR TAPE.=+ STATISTICS ON DATA STORED IN  MERRHH-   -CTP
 A PROGRAM FOR KENDALL'S TAU.=                                BECKSL-   -PKS
 CLASSIFICATION PROGR+A TAXONOMIC OPTIMIZATION PROCEDURE AND  LINGJC-   -TOP
          NUMERICAL TAXONOMY.=                               FLAKR -   -NT
                         TCHS 2 CLUSTER ANALYSIS.=            FRAN  -   -TCA
 NT TRIALS X N EVENTS +  TCHS 3--PROBABILITIES OF K INDEPENDE  FRAN  -   -TPK
                         TCHS 4 CORRELATION COEFFICIENTS.=    FRAN  -   -TCC
 CHI-SQUARE VALUES OR +  TCHS 5--A PROGRAM TO COMPUTE ALL 2X2  FRAN  -   -TPC
 RTS FOR THE EXPLORATIO+ TCHS 6 A PROGRAM TO PLOT KINDRED CHA  FRAN  -   -TPP
 ED PARTIAL CORRELATION+ TCHS 7--A PROGRAM TO COMPUTE SPECIFI  FRAN  -01-TPC
 E.=                     TCHS1-ONE-FACTOR ANALYSIS OF VARIANC  FRAN  -   -TOF
 LAGRANGIAN +  E1-HADM- TEAARD--A THREE POINT SECOND DEGREE   DEPTHE-   -EHT
 E RANKED BY THE CORNELL TECHNIQUE.=     + NO 2 RESPONDENTS AR  DIXOWJ-03-BSG
 DETECTION AND AVERAGING TECHNIQUES IN COMPUTER ANALYSIS OF   ADEYWR-   -APD
```

```
LATION, A PROG+E1-HADM-  TEDUBL--LAGRANGIAN BIVARIATE INTERPO   DEPTHE-01-EHT
DIFFERENCES IN CENTRAL  TENDENCIES AMONG A SET OF SUBJECT       VELDDJ-01-APD
         FOR TEST SCORING  TEST ANALYSIS ITEM ANALYSIS AND      WOLFR - -TPT
G2-NIH-NIH026G--T-  TEST FOR CORRELATED MEANS.=                 DEPTHE-09-GNN
1MPO30--A PROGRAM TO  TEST FOR DIFFERENCES BETWEEN MEANS        STERT - -MPT
       BARTLETT'S  TEST FOR HOMOGENEITY OF VARIANCES.=          MCMACA- -BST
ROGRAM WHICH +TWO SIGMA  TEST FOR THREE AREAS AND NTAPES--A P   OGBORE- -TST
P-VALUES FOR FISHER'S F  TEST GIVEN THE F STATISTIC AND THE     SULZES- -CPV
=          GO HED F02  TEST H**2, WITH COVARIANCE CONTROLS.     MEIEP -05-GHF
E CLASSICAL CHI-SQUARED  TEST ON A FOUR FOLDTABLE.=   + OR TH   SULZES- -PFS
PERFORMANCE OF FISHER'S  TEST OR THE CLASSICAL CHI-SQUARED      SULZES- -PFS
=            A T-  TEST PROGRAM FOR INDEPENDENT GROUPS.         BENDAW- -TTP
AT ONE+1MPO15--MARSHALL  TEST PROGRAM TESTS THE HYPOTHESIS TH   STERT - -MMT
SCREENING A PROGRAM TO  TEST RAW INPUT DATA TO FIND THE         DEPTHE-29-GNN
    A PROGRAM FOR  TEST SCORING AND ITEM ANALYSIS.=            BAKEFD- -PTS
TSSA2--A PROGRAM FOR  TEST SCORING TEST ANALYSIS ITEM           WOLFR - -TPT
S BASED ON DISTANCES IN  TEST SPACE.=        + GROUPING ANALYSI VELDDJ- -GPW
     EXACT TEST TO  TEST THE PROBABILITY OF THE FREQUENC        STERT - -MFS
     PROGRAM TO  TEST THE SIGNIFICANCE OF DIFFERENCES           DICKKW- -KFS
NCE BETWEEN + T-TEST TO  TEST THE SIGNIFICANCE OF THE DIFFERE   STERT - -TTT
1MPO16--FISHER'S EXACT  TEST TO TEST THE PROBABILITY OF THE     STERT - -MFS
DIFFERENCE BETWEEN +T-  TEST TO TEST THE SIGNIFICANCE OF THE    STERT - -TTT
     PROGRAM TO  TEST WHETHER SOME SPECIFIC PATTERN             DEPTHE-02-GNN
TEST-A PROGRAM TO  TEST WHETHER TWO OR MORE VARIANCES           STERT - -MQB
PLOTS A HISTOGRAM OF+T-  TEST WITH HISTOGRAM--A PROGRAM THAT     NICHHC-10-TTH
   STUDENT T-  TEST.=                                           OVERJE- -STT
   CHI-SQUARE  TEST.=                                           PR LLI- -CST
   STUDENT'S T-  TEST.=                                         PR LLI- -SST
EST, F-TEST, CHI-SQUARE  TEST.=              T-T                OGBORE- -TTF
EAR FIT PROGRAM WITH T-  TEST.=      1MPO04 A LIN               STERT - -MLF
UATION OF THE REPERTORY  TEST.=      A PROGRAM FOR EVAL         HESSHF- -PER
ROUPS, COMPARES WITH F-  TEST.=+VARIANCE BETWEEN AND WITHIN G   STERT - -MOW
RISON OF MEANS (SCHEFFE  TEST).=         A PROGRAM COMPA        SMITWN- -PCM
INUS 2 SIGMA (CHAUVENET  TEST).=    + SAMPLE AGAINST PLUS OR M  OGBORE- -TST
STANDARD DEVIATION, T-  TEST).=    STATISTICAL ROUTINE (MEAN,   OGBORE- -SRM
R MORE+1MPO2Q--BARTLETT  TEST-A PROGRAM TO TEST WHETHER TWO O   STERT - -MQB
T-TEST, F-  TEST, CHI-SQUARE TEST.=                            OGBORE- -TTF
T-  TEST, F-TEST, CHI-SQUARE TEST.=                            OGBORE- -TTF
RESPONSE FROM PULSE  TESTING DATA USING FILON'S FORMULA         CLEMWC-01-CFR
RESPONSB FROM PULSE  TESTING DATA USING THE TRAPEZOIDAL         CLEMWC- -CFR
         TESTS FOR LINEARITY OF REGRESSION.=                   MCMACA- -TLR
AND INDEPENDENT T-  TESTS FOR UP TO 10 VARIABLES REPEATE        OVERJE- -MPI
ROGRAM FOR SIGNIFICANCE  TESTS OF DIFFERENCE BETWEEN MEANS.=    CABORA- -PST
OF TWO POPULATIONS.=  TESTS OF HYPOTHESES CONCERNING MEANS      MCMACA- -THC
   TEST PROGRAM  TESTS THE HYPOTHESIS THAT ONE OF              STERT - -MMT
VECTOR SIGNIFICANCE  TESTS.=                                   ROSEG - -VST
PERSONS, RATHER THAN OF  TESTS.=       + FACTOR ANALYSIS OF     VELDDJ- -TPC
VE DATA WITH CHI-SQUARE  TESTS.=       + ANALYSIS OF QUALITATI  OVERJE- -FAQ
BMD07V, MULTIPLE RANGE  TESTS--A PROGRAM TO COMPUTE AN ANALY    DIXOWJ- -BVM
INTERCORRELATION  TETRACHORIC APPROXIMATIONS AND ELEME          VELDDJ- -CPP
A PROGRAM FOR THE  TETRACHORIC CORRELATION.=                   CHARM - -PTC
SPECTRA TC CREATE A  THEORETICAL COMPOSITE SPECTRUM.=           OGBORE- -SAP
MMATION PROG+ICR NO 1 '  THREE AND TWO DIMENSIONAL FOURIER SU   PATTAL- -INT
ICH +TWO SIGMA TEST FOR  THREE AREAS AND NTAPES--A PROGRAM WH   OGBORE- -TST
```

POLY+B1-HADM-TEAARD--A THREE POINT SECOND DEGREE LAGRANGIAN   DEPTHE- -EHT
ADJUS+G4 HED FO2 TWO TO THREE WAY ANALYSIS OF VARIANCE COV.   MEIEP -04-GHF
ROPORTIONATE CELL FREQ+ THREE-WAY ANALYSIS OF VARIANCE FOR P   OVERJE-01-TWA
G1-NIH-NIH003G-TWO AND THREEWAY CROSSTABULATIONS OF FREQUEN   DEPTHE-28-GNN
G3 UCM MIX TIME SERIES ANALYSIS NO 1.=   MEIEP -01-GUM
G3 UCM MIX TIME SERIES ANALYSIS NO 2.=   MEIEP - -GUM
A PROGRAM FOR TIME SERIES COMPONENTS ANALYSIS.=   SCHRND- -PTS
CN ANALYSIS OF MULTIPLE TIME SERIES.   + AND CROSS CORRELATI   OVERJE- -ACC
RAL DENSITY ANALYSIS OF TIME SERIES.=   SPECT   OVERJE- -SDA
NY PERIODIC FUNCTION OR TIME SERIES.= + FOURIER SERIES TO A   SULZES- -FFS
SHIFT IN RESPONSE FROM TIME 1 TO TIME 2.=+CHI-SQUARE OF THE   DEPTHE-10-GNN
RESPONSE FROM TIME 1 TO TIME 2.=+CHI-SQUARE OF THE SHIFT IN   DEPTHE-10-GNN
VARIABLES REPEATED OVER TIME.=   + T-TESTS FOR UP TO 10   OVERJE- -MPI
ACTIVITY--VARIABLE TIME--A COMPUTER PROGRAM TO DETERMIN   OGBORE- -SAV
OR VARIABLE IRRADIATION TIMES.= + NEURON IRRADIATED SAMPLE F   OGBORE- -SAV
S OF STIMULI CVER HEART TISSUE.= + OF THE PROPAGATION PROCBS   RHEIWC- -MMP
FLUOROMETRIC TITRATION OF ANTIBODIES.=   EISEH - -FTA
COMPUTE INDIVIDUAL AND TOTAL CHI-SQUARE DISTRIBUTIONS.=+ TO   DEPTHE-05-GNN
PROGRAM PREPARES YEAR TOTAL OF ACTIVITY PER ELEMENT.=   OGBORE- -SSR
RANSPOSED FACTOR ANALY+ TRANFACT--A PROGRAM TO CARRY OUT A T   VELDDJ- -TPC
A PROGRAM TO TRANSFORM A MATRIX INTO NEARLY A   DEPTHE- -FNN
KSL 4.10--A PROGRAM TO TRANSFORM RAW SCORES TO STANDARD   DICKKW- -KPT
A PROGRAM FOR TRANSFORMATION ANALYSIS.=   KINGFJ- -PTA
FOR A REGRESSION TRANSFORMATION OF PSYCHOPHYSIOLOGIC   WILLBJ- -PRT
KSL 2.50--FISHER'S Z TRANSFORMATION PROGRAM TO TEST THE   DICKKW- -KFS
ULTIPLE REGRESSION WITH TRANSFORMATIONS.= KSL 2.20, K-14--M   DICKKW- -KKM
AR MATRIX BY SIMILARITY TRANSFORMATIONS.=+ NEARLY A TRIANGUL   DEPTHE- -FNN
(CORRELATION WITH TRANSGENERATION)--A PROGRAM TO COMPU   DIXOWJ- -BDC
PROGRAM TO CARRY OUT A TRANSPOSED FACTOR ANALYSIS OF PERSON   VELDDJ- -TPC
TESTING DATA USING THE TRAPEZOIDAL RULE FOR NUMERICAL EVALU   CLEMWC- -CFR
ON PRCGRAM OF RADIATION TREATMENT PLANNING.=   AN AUTOMATI STERTD- -APR
BIOASSAY WITH A SINGLE TREATMENT.=   + ANALYSIS OF QUANTAL   SULZES- -PAQ
ORTHOGONAL POLYNOMIAL TREND ANALYSIS.=   OVERJE- -OPT
LATION ANALYSIS.=   TREND CORRECTED AUTO AND CROSS CORRE   OVERJE- -TCA
COVARIANCES AND SERIAL TREND.=   + WITH SPECIFIED MEANS,   DICKKW-01-KCS
PROGRAM FOR MCNTE CARLO TRIALS ON A LINEAR LEARNING MODEL   CAMPDP- -PMC
OF K INDEPENDENT TRIALS X N EVENTS (VARTING PROBABILI   FRAN - -TPK
A MATRIX INTC NEARLY A TRIANGULAR MATRIX BY SIMILARITY   DEPTHE- -FNN
DETERMINANT OF A NEARLY TRIANGULAR MATRIX.=+TO EVALUATE THE   DEPTHE-08-FNN
BRAGG'S LAW FOR THE + TRIGONOMETRIC FUNCTIONS ACCORDING TO   PARNBL- -TFA
FITS BY LEAST SQUARES A TRIGONOMETRIC SERIES UP TO THE NINTH   DIXOWJ- -BRP
ST ANALYSIS ITEM ANALY+ TSSA2--A PROGRAM FOR TEST SCORING TE   WOLFR - -TPT
INNING PRUGRAM.=   TWIN II-A STATISTICAL ANALYSIS OF TW   CARLJP- -TIS
STATISTICAL ANALYSIS OF TWINNING PROGRAM.=   TWIN II-A   CARLJP- -TIS
FREQUE+G1-NIH-NIH003G- TWO AND THREEWAY CROSSTABULATIONS OF   DEPTHE-28-GNN
ORDINATE AND/CR AREA OF TWO CLOSELY RELATED PROBABILITY   DEPTHE-07-GNN
AREA CR DERIVATIVE OF TWO CLOSELY RELATED PROBABILITY   DEPTHE-08-GNN
TWO CORRELATION PROGRAMS.=   IKERPH- -TCP
LCR NO 1 'THREE AND TWO DIMENSIONAL FOURIER SUMMATION   PATTAL- -INT
DISCRIMINANT ANALYSIS-- TWO GROUPS.=   G1 UCM FO2   MEIEP -14-GUF
ON EACH INDIVIDUAL OF TWO GROUPS-THE FUNCTION IS THEN   DIXOWJ- -BMD
ANALYSIS FOR TWO GROUPS, A PROGRAM THAT COMPUTES   DIXOWJ- -BMD
UF FACTOR-VECTORS FROM TWO INDEPENDENT FACTOR ANALYSES.=   VELDDJ- -MPC
THE DIPFERENCE BETWEEN TWO MEANS.=+TEST THE SIGNIFICANCE OF   STERT - -TTT

```
UCM F02 SIMPLE MISSING VALUE ROUTINE NO 3.=                    G1    MEIEP -27-GUF
 F +  CALCULATION OF P- VALUES FOR FISHER'S F TEST GIVEN THE         SULZES- -CPV
FIT A PLANE TO DISCRETE VALUES OF A FUNCTION OF TWO VARIABLE         DEPTHE-01-EHN
FIT A PLANE TO DISCRETE VALUES OF A FUNCTION OF TWO VARIABLE         DEPTHE-01-EHT
     ALL 2X2 CHI-SQUARE VALUES OF A MATRIX OF DICHOTOMOUS            FRAN  - -TPC
ED F02 EIGENVECTORS AND VALUES OF A NONSYMMETRIC MATRIX.=+ H         MEIEP -01-FHF
  PROGRAM TO COMPUTE THE VALUES OF THE FOURIER SERIES AT A           DEPTHE- -ENN
              PREDICTED VALUES PROGRAM TO SELECT FOR EACH            DEPTHE-23-GNN
ES OF DATA WITH MISSING VALUES.=         + CORRELATION MATRIC        DAS RS- -UPP
UDING SPECIFIED SPECIAL VALUES.=         + OF INPUT DATA EXCL        DIXOWJ-02-BDC
E AND SMALLEST NEGATIVE VALUES.=+EXTRACT THE LARGEST POSITIV         DICKKW-01-KPT
     INTERVALS OF ONE VARIABLE AND COMPUTE SIMPLE STATISTI           DIXOWJ-03-BDD
   BETWEEN A DEPENDENT VARIABLE AND ONE OR MORE INDEPENDENT          DIXOWJ- -BRS
PERCENTS OF CASES OF A VARIABLE FALLING INTO 3 CLASSES.=             MASSFJ- -XHL
N IRRADIATED SAMPLE FOR VARIABLE IRRADIATION TIMES.= + NEURO         OGBORE- -SAV
NONLINEAR ESTIMATION ( VARIABLE METRIC METHOD).=+E2 UCC BIN          MEIEP - -EUB
NONLINEAR ESTIMATION ( VARIABLE METRIC METHOD).=+E2 UOC F02          MEIEP -01-EUF
STANDARD SPECTRUM FROM VARIABLE NUMBER OF CASES.=+COMPUTE A          OGBORE- -POF
MULTIPLIER--MULTIPLIES VARIABLE NUMBER OF CHANNELS BY A              OGBORE- -FMM
        SINGLE VARIABLE OF CLASSIFICATION.=                          MCMACA- -SVC
VARIANCE TABLE, FOR ONE VARIABLE OF CLASSIFICATION, WITH             DIXOWJ- -BVM
     TO SELECT FOR EACH VARIABLE SPECIFIED INDEPENDENT VARIA         DEPTHE-23-GNN
   CROSS TABULATION WITH VARIABLE STACKING--A PROGRAM TO             DIXOWJ-03-BDC
DETE+SAMPLE ACTIVITY-- VARIABLE TIME--A COMPUTER PROGRAM TO          OGBORE- -SAV
A CONTINUOUS CRITERION VARIABLE.=         ITEM ANALYSIS USING        IKERHP-01-IAU
TO PREDICT A DEPENDENT VARIABLE.=        + VARIABLES IN ORDER        DEPTHE-23-GNN
A DICHOTOMOUS CRITERION VARIABLE.=         ITEM ANALYSIS USING       IKERHP- -IAU
ES TO PREDICT DEPENDENT VARIABLE.=       + OF INDEPENDENT VARIABL     DEPTHE-22-GNN
   DEVIATION OF SEVERAL VARIABLES AND THEIR 90 PERCENT AND           STERT -01-MPC
CROSS- CLASSIFIES GIVEN VARIABLES BY OTHER VARIABLES.=               SAKOJM- -XGC
  PROGRAM TO COMPUTE NEW VARIABLES FOR CORRELATION INPUT.=+ A        DEPTHE-20-GNN
  SPECIFIED INDEPENDENT VARIABLES IN ORDER TO PREDICT A              DEPTHE-23-GNN
  THAT ONE OF TWO RANDOM VARIABLES IS STOCHASTICALLY LARGER          STERT - -MMT
A LINEAR FUNCTION OF P VARIABLES MEASURED ON EACH INDIVIDUA          DIXOWJ- -BMD
D MEASUREMENTS.=      TWO VARIABLES OF CLASSIFICATION, REPEATE       MCMACA-01-TVC
OBSERVATION.=      TWO VARIABLES OF CLASSIFICATION, SINGLE           MCMACA- -TVC
ASSOCIATED WITH PAIRED VARIABLES OF UNEQUAL SAMPLE SIZE.=            DEPTHE-14-GNN
OF ALL COMBINATIONS OF VARIABLES PROGRAM. IT COMPUTES, THE           OGBORE- -ELR
WEIGHT TO GIVEN DATA ON VARIABLES RANKS THE CASES AND ASSIGN         DIXOWJ-01-BSG
  T-TESTS FOR UP TO 10 VARIABLES REPEATED OVER TIME.=               OVERJE- -MPI
  NUMBER OF INDEPENDENT VARIABLES TO PREDICT DEPENDENT VARIA         DEPTHE-22-GNN
IVEN VARIABLES BY OTHER VARIABLES.=       + CROSS- CLASSIFIES G      SAKOJM- -XGC
 OF ALL COMBINATIONS OF VARIABLES.=       + REGRESSION ANALYSIS      OGBORE- -LRA
A MATRIX OF DICHOTOMOUS VARIABLES.=    + CHI-SQUARE VALUES OF         FRAN  - -TPC
ASURES OF DISPERSION OF VARIABLES.= + SIMPLE AVERAGES AND ME         DIXOWJ- -BDS
ONE OR MORE INDEPENDENT VARIABLES.=+ DEPENDENT VARIABLE AND          DIXOWJ- -BRS
TWO SETS OF STATISTICAL VARIABLES.=+ LINEAR COMBINATIONS OF          DEPTHE-17-GNN
N A SERIES OF DEPENDENT VARIABLES.=+ SET OF SUBJECT GROUPS O         VELDDJ-01-APD
ONS BETWEEN TWO SETS OF VARIABLES.=+ THE CANONICAL CORRELATI         DIXOWJ- -BMC
ES OF A FUNCTION OF TWO VARIABLES.=+A PLANE TO DISCRETE VALU         DEPTHE-01-EHN
ES OF A FUNCTION OF TWO VARIABLES.=+A PLANE TO DISCRETE VALU         DEPTHE-01-EHT
RIX, OMITTING UNDESIRED VARIABLES.=+A SIMPLE CORRELATION MAT         DIXOWJ-G1-BDC
COMBINATIONS OF CONTROL VARIABLES.=+TABLES FOR ALL POSSIBLE          SAKOJM- -TTS
DENCE AMONG TWO SETS OF VARIABLES'.=+DIMENSIONS OF CORRESPON         VELDDJ- -CPT
```

```
=                           VARIANCE ANALYSIS (FROM UCRBL 0014).    OGBORE-  -VAU
              ANALYSIS OF VARIANCE AND COVARIANCE.=                  PR LLI-  -AVC
       MEANS, STO. ERROR, VARIANCE BETWEEN AND WITHIN GROUPS,        STERT -  -MOW
O THREE WAY ANALYSIS OF VARIANCE COV. ADJUST.=+HED FO2 TWO T         MEIEP -04-GHF
DEVELOP THE ANALYSIS OF VARIANCE FOR A REPLICATED TWO-DIMENS         STERT -01-MPD
   BMDO2V, ANALYSIS OF VARIANCE FOR FACTORIAL DESIGN. =              DIXOWJ-02-BVA
 THREE-WAY ANALYSIS OF VARIANCE FOR PROPORTIONATE CELL               OVERJE-01-TWA
   TWO-WAY ANALYSIS OF VARIANCE FOR PROPORTIONATE CELL               OVERJE-02-TWA
   TWO-WAY ANALYSIS OF VARIANCE FOR UNEQUAL AND DISPROPORTI          OVERJE- -TWA
        MEAN WHEN THE VARIANCE IS UNKNOWN, T-DISTRIBUTION.           MCMACA-  -CSM
G4 UCM MIX ANALYSIS OF VARIANCE NO 2.=                               MEIEP -04-GUM
G4 UCM MIX ANALYSIS OF VARIANCE NO1.=                                MEIEP -02-GUM
TO NATURAL CLUSTERING+ VARIANCE OF MEAN OF A SAMPLE SUBJECT          HOPKCG-  -VMS
       WAY ANALYSIS OF VARIANCE PROGRAM THAT COMPUTES MEANS          STERT -  -MOW
REANOVA--AN ANALYSIS OF VARIANCE PROGRAM.=                           VELDDJ-  -RAV
A4--A 4-WAY ANALYSIS OF VARIANCE PROGRAM.=              ANV          SAKOJM-  -AWA
--A ONE WAY ANALYSIS OF VARIANCE PROGRAM.=    G4-NIH-NIHO18G         DEPTHE-12-GNN
COMPUTE AN ANALYSIS OF VARIANCE TABLE, FOR ONE VARIABLE OF           DIXOWJ-  -BVM
     3 WAY ANALYSIS OF VARIANCE WITH AND WITHOUT REPLICATIO          STERT -  -MWA
   FOR THE ANALYSIS OF VARIANCE WITH REPEATED MEASURES.=            HARTDL-  -PAV
       WAY ANALYSIS OF VARIANCE WITH REPLICATION AND MISSIN         STERT -01-MWA
            ANALYSIS OF VARIANCE.=                                   MCKIRE-  -AV
            ANALYSIS OF VARIANCE.=                                   MEDICO-  -AV
   ONE-WAY ANALYSIS OF VARIANCE.=                                    OVERJE-  -OWA
PROGRAM FOR ANALYSIS OF VARIANCE.=                       A           STOCFD-  -PAV
-ONE-FACTOR ANALYSIS OF VARIANCE.=                    TCHS1          FRAN  -  -TOF
FOR GENERAL ANALYSIS OF VARIANCE.=             A PROGRAM             DICKAW-  -PGA
CATED 2 WAY ANALYSIS OF VARIANCE.= + SUMMARY TABLE FOR REPLI         STERT -  -MPC
EANS WITH HETEROGENEOUS VARIANCE.=+FOR DIFFERENCES BETWEEN M         STERT -  -MPT
CATED 2 WAY ANALYSIS OF VARIANCE.=+SUMMARY TABLE FOR UNREPLI         STERT -  -MPD
          CORRELATIONS, VARIANCE- COVARIANCES MEANS AND STD          DICKKW-  -KKP
IERARCHICAL ANALYSIS OF VARIANCE, HI-AOV.=   A PROGRAM FOR H         PULLG -  -PHA
     WHETHER TWO OR MORE VARIANCES DIFFER SIGNIFICANTLY (CHI-        STERT -  -MQB
TEST FOR HOMOGENEITY OF VARIANCES.=             BARTLETT'S           MCMACA-  -BST
                        VARIMAX AND QUARTIMAX ROTATIONS.=            VANDSG-  -VQR
PROGRAM FOR NORMALIZED VARIMAX FACTOR ROTATION.=          A          BENDAW-  -PNV
 AXIS FACTOR ANALYSIS, VARIMAX ROTATION AND FACTOR SCORE             VELDDJ-  -API
(KAISER).=   G3 HED FO2 VARIMAX ROTATION OF A FACTOR MATRIX          MEIEP -03-GHF
.=          NORMALIZED VARIMAX ROTATION OF FACTOR SOLUTIONS          OVERJE-  -NVR
   FACTOR ANALYSIS AND VARIMAX ROTATION ON A CORRELATION             DEPTHE-  -GNN
ANALYSIS (C) CRTHOGGNAL VARIMAX ROTATION.=    + AXIS FACTOR          VELDDJ-  -FPP
FO2 SUBROUTINE ROTATB ( VARIMAX).=             3 GO UCM              MEIEP -08-GUF
 A PROGRAM TO COMPUTE VARIOUS STATISTICS ASSOCIATED WITH             DEPTHE-14-GNN
ENT TRIALS X N EVENTS ( VARTING PROBABILITIES).=+ K INDEPEND         FRAN  -  -TPK
          POWERED VECTOR FACTOR ANALYSIS.=                           OVERJE-  -PVF
CLASSIFICATL+NORMALIZED VECTOR PRODUCT MULTIVARIATE PROFILE          OVERJE-  -NVP
                        VECTOR SIGNIFICANCE TESTS.=                  ROSEG -  -VST
 A PROGRAM TO OBTAIN A VECTOR SOLUTION OF A SET OF N SIMULT          DEPTHE-09-FNN
IH-NIHOO3F EIGENVALUES- VECTORS AND MATRIX MULTIPLICATIONS.=         DEPTHE-04-FNN
COMBINATIONS CF FACTOR- VECTORS FROM TWO INDEPENDENT FACTOR          VELDDJ-  -MPC
HED FO2 EIGENVALUES AND VECTORS OF A REAL SYMMETERIC MATRIX.         MEIEP -  -FHF
         EIGENVALUES- VECTORS OF A REAL SYMMETRIC MATRIX             DEPTHE-06-FNN
NIH-NIHO1O EIGENVALUES- VECTORS OF NONSYMMETRIC MATRIX.=+F2-         DEPTHE-07-FNN
G EITHER THE CBLIMAX OR VERIMAX CRITERION.=   + ANALYSIS USIN        BRIDDA-  -SSA
```

72

73

```
)--THE PROGRAM PREPARES YEAR TOTAL OF ACTIVITY PER ELEMENT.=   OGBORE→  -SISR
OR DISCRETE, BISTABLE ( YES OR NO) DATA.=   + COEFFICIENTS F   STERT -01-MPT
  REGSCOR--A PROGRAM TO YIELD PREDICTED CRITERION SCORES.=     VELDDJ-  -RPY
NE THAT CUMPUTES CORR + Z CCOR A ZERO CELL CORRELATION ROUTI   SAKOJM-  -ZCZ
     KSL 2.50--FISHER'S Z TRANSFORMATION PROGRAM TO TEST THE   DICKKW-  -KFS
CMPUTES CORR + Z CCOR A ZERO CELL CORRELATION ROUTINE THAT C   SAKOJM-  -ZCZ
.=                      ZO BSC AC PEDIATRIC CORRELATION PH 1   MEIEP -  -ZBA
```

PART B

AUTHOR INDEX

```
ADEY WR            ADEYWR-   -APD
ANDERSON BL        ANDEBL-   -CLS
                   ANDEBL-   -EEC
BAILEY KK          BAILKK-   -RA
BAKER FB           BAKEFB-   -AED
                   BAKEFB-   -PSP
BAKER FD           BAKEFD-   -PTS
BALINTFY JL        BALIJL-   -MPC
BALL WE            BALLWE-   -NLR
BECK P             BECKP -   -HGH
BECKER SL          BECKSL-   -PKS
BEJARANO GG        BEJAGG-   -NLR
BENDIG AW          BENDAW-   -ACC
                   BENDAW-   -IAP
                   BENDAW-   -OFS
                   BENDAW-   -PNV
                   BENDAW-   -PPA
                   BENDAW-   -RRP
                   BENDAW-   -SDS
                   BENDAW-   -TTP
                   BENDAW-01-IAP
                   BENDAW-02-IAP
BLACK CR           BLACCR-   -ACA
BONATO RR          BONARR-   -GCC
BRAUNSTEIN ML      BRAUML-   -SDA
BRIDGER DA         BRIDDA-   -EDD
                   BRIDDA-   -SSA
BRUNKE RE          BRUNRE-   -GUC
CABOT RA           CABORA-   -PST
CAMPBELL DP        CAMPDP-   -PMC
CARLOS JP          CARLJP-   -BPP
                   CARLJP-   -IDP
                   CARLJP-   -P
                   CARLJP-   -PPA
                   CARLJP-   -RPE
                   CARLJP-   -TIS
                   CARLJP-   -VLT
CASE INSTITUTE OF
                   CASEIN-   -SER
CASTELLAN          CAST  -   -BPB
CATTELL RB         CATTRB-   -RPM
CHARAP M           CHARM -   -PTC
CHRISTOPHER A      CHRIA -   -HPH
CISLAK PJ          CISLPJ-   -LSF
```

```
CLASEN RJ        CLASRJ-   -LLP
CLEMENTS WC      CLEMWC-   -CFR
                 CLEMWC-01-CFR
COOPER I         DANTGB-   -MMH
CRAMER BN        CRAMEN-   -GCP
DAMMKOEHLER RA   DAMMRA-   -NPS
DANTZIG GB       DANTGB-   -MMH
DAS RS           DAS RS-   -PCS
                 DAS RS-   -UPP
DAYHOFF MO       DAYHMO-   -CCP
DEHAVEN JC       DANTGB-   -MMH
DEPT HEALTH EDUCAT
                 DEPTHE-   -EHN
                 DEPTHE-   -EHP
                 DEPTHE-   -EHT
                 DEPTHE-   -ENN
                 DEPTHE-   -FHN
                 DEPTHE-   -FNN
                 DEPTHE-   -GHC
                 DEPTHE-   -GNN
                 DEPTHE-   -HNN
                 DEPTHE-01-EHN
                 DEPTHE-01-EHT
                 DEPTHE-01-ENN
                 DEPTHE-01-FHN
                 DEPTHE-01-GNN
                 DEPTHE-02-EHN
                 DEPTHE-02-FHN
                 DEPTHE-02-FNN
                 DEPTHE-02-GNN
                 DEPTHE-03-FHN
                 DEPTHE-03-FNN
                 DEPTHE-03-GNN
                 DEPTHE-   -GHA
                 DEPTHE-   -FHS
                 DEPTHE-04-FNN
                 DEPTHE-05-FNN
                 DEPTHE-05-GNN
                 DEPTHE-06-FNN
                 DEPTHE-06-GNN
                 DEPTHE-07-FNN
                 DEPTHE-07-GNN
                 DEPTHE-08-FNN
                 DEPTHE-09-GNN
                 DEPTHE-08-GNN
                 DEPTHE-09-FNN
                 DEPTHE-10-GNN
                 DEPTHE-11-FNN
                 DEPTHE-11-GNN
                 DEPTHE-12-GNN
                 DEPTHE-10-FNN
                 DEPTHE-13-GNN
                 DEPTHE-14-GNN
                 DEPTHE-15-GNN
```

```
                       DEPTHE-16-GNN
                       DEPTHE-17-GNN
                       DEPTHE-19-GNN
                       DEPTHE-21-GNN
                       DEPTHE-22-GNN
                       DEPTHE-23-GNN
                       DEPTHE-24-GNN
                       DEPTHE-25-GNN
                       DEPTHE-26-GNN
                       DEPTHE-27-GNN
                       DEPTHE-28-GNN
                       DEPTHE-29-GNN
                       DEPTHE-20-GNN
                       DEPTHE-18-GNN
                       DEPTHE-04-GNN
                       DEPTHE-12-FNN
DICKINSON AW           DICKAW-   -PGA
DICKMAN KW             DICKKW-   -KAP
                       DICKKW-   -KAS
                       DICKKW-   -KCS
                       DICKKW-   -KDC
                       DICKKW-   -KDS
                       DICKKW-   -KFD
                       DICKKW-   -KHO
                       DICKKW-   -KKA
                       DICKKW-   -KKC
                       DICKKW-   -KKL
                       DICKKW-   -KKM
                       DICKKW-   -KKP
                       DICKKW-   -KLI
                       DICKKW-   -KRA
                       DICKKW-   -KML
                       DICKKW-   -KPT
                       DICKKW-01-KCS
                       DICKKW-01-KPT
                       DICKKW-02-KCS
                       DICKKW-01-KAP
                       DICKKW-   -KFS
DIECKMANN WL           DIECWL-   -PPE
DIXON WJ               DIXOWJ-   -BBA
                       DIXOWJ-   -BDC
                       DIXOWJ-   -BDD
                       DIXOWJ-   -BDG
                       DIXOWJ-   -BDS
                       DIXOWJ-   -BMC
                       DIXOWJ-   -BMG
                       DIXOWJ-   -BMR
                       DIXOWJ-   -BRA
                       DIXOWJ-   -BRM
                       DIXOWJ-   -BRP
                       DIXOWJ-   -BRS
                       DIXOWJ-   -BSC
                       DIXOWJ-   -BSG
                       DIXOWJ-   -BSL
```

```
                      DIXOWJ-   -BTA
                      DIXOWJ-   -BMP
                      DIXOWJ-   -BMD
                      DIXOWJ-   -BVA
                      DIXOWJ-   -BVG
                      DIXOWJ-   -BVM
                      DIXOWJ-01-BDC
                      DIXOWJ-01-BDD
                      DIXOWJ-01-BMD
                      DIXOWJ-01-BRP
                      DIXOWJ-01-BSG
                      DIXOWJ-01-BTA
                      DIXOWJ-01-BVA
                      DIXOWJ-01-BVG
                      DIXOWJ-02-BDC
                      DIXOWJ-02-BDD
                      DIXOWJ-02-BSG
                      DIXOWJ-03-BDD
                      DIXOWJ-02-BVA
                      DIXOWJ-03-BDC
                      DIXOWJ-04-BSG
                      DIXOWJ-03-BSG
                      DIXOWJ-01-BRS
EIMER RA              EIMERA-   -CF
EISEN H               EISEH -   -FTA
FINK M                FINKM -   -PSD
FLAKE R               FLAKR -   -NT
FOSTER MJ             CATTRB-   -RPM
FRANCIS              FRAN  -   -TCA
                      FRAN  -   -TCC
                      FRAN  -   -TOF
                      FRAN  -   -TPC
                      FRAN  -   -TPK
                      FRAN  -01-TPC
                      FRAN  -   -TPP
FRANZ DR             FRANDR-   -MSR
GALLER AB            GALLAB-   -CSP
GILLIS PA            GILLPA-   -PFE
GULLIKSEN H          GULLH -   -BPP
HAGENSICK PW         HAGEPW-   -PSP
HAMBLIN RL           HAMBRL-   -XER
HARTFORD D           HARTD -   -PIF
HARTFORD DL          HARTDL-   -PAV
HESS HF              HESSHF-   -PER
HOBBY C              HOBBC -   -ISP
HOFFMAN EP           HOFFEP-   -PCA
HOFFMAN PJ           HOFFPJ-   -PCA
HOFLER JJ            HOFLJJ-   -APD
HOLLOWAY C           HOLLC -   -PFS
HOPKINS CG           HOPKCG-   -VMS
IKER HP              IKERHP-   -IAU
                      IKERHP-01-IAU
IKER PH              IKERPH-   -TCP
JENNINGS E           JENNE -   -PIM
```

79

```
KING FJ          KINGFJ-    -PFE
                 KINGFJ-    -PTA
KIRKPATRICK      KIRK  -    -SSA
KRONE LH         KRONLH-    -GC
LADD CE          LADDCE-    -CPC
LANGE S          LANGS -    -BVA
LEDLEY RS        DAYHMO-    -CCP
LEVONIAN E       LEVOE -    -SRP
LINGOES JC       LINGJC-    -PCR
                 LINGJC-    -MSA
                 LINGJC-    -PSA
                 LINGJC-    -PMP
                 LINGJC-    -PSR
                 LINGJC-    -SDA
                 LINGJC-    -TOP
                 LINGJC-,   -MSA
MARTING CH       MARTCH-    -SMR
MASSEY FJ        MASSFJ-    -XCC
                 MASSFJ-    -XHL
                 MASSFJ-    -XLP
                 MASSFJ-    -XOW
                 MASSFJ-    -XPP
                 MASSFJ-    -XPO
                 MASSFJ-    -XST
                 MASSFJ-    -XTW
                 MASSFJ-01-XCC
                 MASSFJ-01-XPP
                 MASSFJ-01-XST
                 MASSFJ-01-XTW
MCKINNEY J       MCKIJ -    -PIA
MCKINNEY RE      MCKIRE-    -AV
                 MCKIRE-    -GLH
MCMAHAN CA       MCMACA-    -BST
                 MCMACA-    -CP
                 MCMACA-    -CSM
                 MCMACA-    -CSY
                 MCMACA-    -LR
                 MCMACA-    -LSP
                 MCMACA-    -PO
                 MCMACA-    -SVC
                 MCMACA-    -THC
                 MCMACA-    -TLR
                 MCMACA-    -TVC
                 MCMACA-01-TVC
MED COLLEGE OF VIR
                 MED CO-    -PSA
MEDICAL COLLEGE OF
                 MEDICO-    -AV
                 MEDICO-    -DEC
                 MEDICO-    -ECF
                 MEDICO-    -GMR
                 MEDICO-    -NOF
                 MEDICO-    -MRA
                 MEDICO-    -SLF
```

80

```
                    MEDICO-   -PAC
MEIER P             MEIEP -   -EUB
                    MEIEP -   -EUF
                    MEIEP -   -FHF
                    MEIEP -   -FUF
                    MEIEP -   -FUM
                    MEIEP -   -GHF
                    MEIEP -   -GUB
                    MEIEP -   -GUD
                    MEIEP -   -GUF
                    MEIEP -   -GUP
                    MEIEP -   -GUM
                    MEIEP -   -ZBA
                    MEIEP -01-EUB
                    MEIEP -01-EUF
                    MEIEP -01-FHF
                    MEIEP -01-GHF
                    MEIEP -01-GUF
                    MEIEP -01-GUM
                    MEIEP -02-FHF
                    MEIEP -02-GHF
                    MEIEP -02-GUF
                    MEIEP -02-GUM
                    MEIEP -03-FHF
                    MEIEP -03-GHF
                    MEIEP -03-GUF
                    MEIEP -03-GUM
                    MEIEP -04-GHF
                    MEIEP -04-GUF
                    MEIEP -04-GUM
                    MEIEP -05-GHF
                    MEIEP -05-GUF
                    MEIEP -05-GUM
                    MEIEP -06-GHF
                    MEIEP -06-GUF
                    MEIEP -06-GUM
                    MEIEP -07-GHF
                    MEIEP -07-GUF
                    MEIEP -08-GHF
                    MEIEP -07-GUM
                    MEIEP -08-GUM
                    MEIEP -08-GUF
                    MEIEP -09-GUF
                    MEIEP -09-GUM
                    MEIEP -10-GUM
                    MEIEP -11-GUA
                    MEIEP -11-GUM
                    MEIEP -12-GUM
                    MEIEP -13-GUF
                    MEIEP -13-GUM
                    MEIEP -14-GUF
                    MEIEP -15-GUF
                    MEIEP -14-GUM
                    MEIEP -16-GUF
```

```
                            MEIEP  -17-GUF
                            MEIEP  -18-GUF
                            MEIEP  -19-GUF
                            MEIEP  -20-GUF
                            MEIEP  -21-GUF
                            MEIEP  -22-GUF
                            MEIEP  -23-GUF
                            MEIEP  -24-GUF
                            MEIEP  -25-GUF
                            MEIEP  -26-GUF
                            MEIEP  -27-GUF
                            MEIEP  -28-GUF
                            MEIEP  -29-GUF
MERRITT HH                  MERRHH-   -CTP
MILLER C                    MILLC -   -FSP
MILLER CR                   MILLCR-   -PFT
                            MILLCR-   -PP
NICHOLS RC                  NICHRC-   -RRI
NICHOLSON HC                NICHHC-   -CFP
                            NICHHC-   -IPW
                            NICHHC-   -LRC
                            NICHHC-   -MCP
                            NICHHC-   -PP
                            NICHHC-10-TTH
NICKLES MR                  NICKMR-   -POR
NUGENT CA                   NUGECA-   -EGU
                            NUGECA-   -DDC
                            NUGECA-   -IDM
OGBORN RE                   OGBORE-   -ABA
                            OGBORE-   -BSP
                            OGBORE-   -CCP
                            OGBORE-   -CP
                            OGBORE-   -DPC
                            OGBORE-   -ECR
                            OGBORE-   -EEA
                            OGBORE-   -ELR
                            OGBORE-   -EP
                            OGBORE-   -FMC
                            OGBORE-   -HEP
                            OGBORE-   -FMM
                            OGBORE-   -IA
                            OGBORE-   -IRT
                            OGBORE-   -LRA
                            OGBORE-   -LSF
                            OGBORE-   -MCM
                            OGBORE-   -MDS
                            OGBORE-   -NTG
                            OGBORE-   -P
                            OGBORE-   -PAP
                            OGBORE-   -PMS
                            OGBORE-   -POF
                            OGBORE-   -PTP
                            OGBORE-   -RCI
                            OGBORE-   -RCV
```

```
                    OGBORE-    -RIC
                    OGBORE-    -SAP
                    OGBORE-    -SAV
                    OGBORE-    -SLL
                    OGBORE-01-MDS
                    OGBORE-    -SRM
                    OGBORE-    -SSA
                    OGBORE-    -SSR
                    OGBORE-    -TST
                    OGBORE-    -TTF
                    OGBORE-    -VAU
                    OGBORE-01-PAP
OVERALL JE          OVERJE-    -BCP
                    OVERJE-    -ACC
                    OVERJE-    -EDF
                    OVERJE-    -FAC
                    OVERJE-    -FAQ
                    OVERJE-    -GLC
                    OVERJE-    -IDF
                    OVERJE-    -LSL
                    OVERJE-    -MCA
                    OVERJE-    -MFI
                    OVERJE-    -MRP
                    OVERJE-    -NVP
                    OVERJE-    -NVR
                    OVERJE-    -OWA
                    OVERJE-    -OPT
                    OVERJE-    -PAF
                    OVERJE-    -PCC
                    OVERJE-    -PMC
                    OVERJE-    -PVF
                    OVERJE-    -SOA
                    OVERJE-    -SOW
                    OVERJE-    -SRM
                    OVERJE-    -STT
                    OVERJE-    -TCA
                    OVERJE-    -TWA
                    OVERJE-01-TWA
                    OVERJE-02-TWA
PARNELL BL          PARNBL-    -ASR
                    PARNBL-    -MR
                    PARNBL-    -TFA
PATTERSON AL        PATTAL-    -INA
                    PATTAL-    -IND
                    PATTAL-    -INF
                    PATTAL-    -INW
                    PATTAL-    -INI
                    PATTAL-    -INL
                    PATTAL-    -INM
                    PATTAL-    -INP
                    PATTAL-    -INS
                    PATTAL-    -INT
                    PATTAL-01-INL
                    PATTAL-01-INS
```

83

```
PETERSON TI      PETETI-   -NLE
PIPBERGER HV     PIPBHV-   -UCI
POWERS WE        POWEWE-   -RDI
PR LIB--MONROBOT X
                 PR LLI-   -AVC
                 PR LLI-   -CST
                 PR LLI-   -LSA
                 PR LLI-   -RCA
                 PR LLI-   -SST
PULLEY G         PULLG -   -PHA
RCA ELECTRONIC DAT
                 RCA EL-   -EA
RHEINVOLDT WC    RHEIWC-   -MMP
ROSE G           ROSEG -   -CTO
                 ROSEG -   -MGD
                 ROSEG -   -FAR
                 ROSEG -   -SFA
                 ROSEG -   -SRR
                 ROSEG -   -VST
ROSENFELD MA     ROSEMA-   -FFC
SAKODA JM        SAKOJM-   -AWA
                 SAKOJM-   -CFC
                 SAKOJM-   -CPC
                 SAKOJM-   -GGC
                 SAKOJM-   -MMC
                 SAKOJM-   -TTS
                 SAKOJM-   -XGC
                 SAKOJM-   -ZCZ
SAUNDERS DR      SAUNDR-   -PFB
SCHAIE KW        SCHAKW-   -UUM
                 SCHAKW-   -UUU
SCHROLLER ND     SCHRND-   -PTS
SHAPIRO          SHAP  -   -EPA
SHAPIRO DM       SHAPDM-   -EPA
SHUMATE KE       SHUMKE-   -CCP
                 SHUMKE-   -EMR
SMITH WN         SMITWN-   -PCM
                 SMITWN-   -PDO
STEIDLER FE      STEIFE-   -PCF
                 STEIFE-   -CA
                 STEIFE-   -MRA
STERLING T       STERT -   -IMI
                 STERT -   -MAC
                 STERT -   -MCC
                 STERT -   -MFD
                 STERT -   -MFS
                 STERT -   -MHG
                 STERT -   -MLF
                 STERT -   -MLS
                 STERT -   -MMR
                 STERT -   -MMT
                 STERT -   -MOW
                 STERT -   -MPC
                 STERT -   -MPD
```

```
                        STERT -   -MPF
                        STERT -   -MQB
                        STERT -   -MPT
                        STERT -   -MSP
                        STERT -   -MWA
                        STERT -   -TTT
                        STERT -01-MPC
                        STERT -01-MPD
                        STERT -01-MPT
                        STERT -01-MWA
                        STERT -02-MPT
STERLING TD             STERTD-   -APR
STOCKTON FD             STOCFD-   -PAV
SULZER ES               SULZES-   -CDS
                        SULZES-   -CPV
                        SULZES-   -FFS
                        SULZES-   -PAQ
                        SULZES-   -PCC
                        SULZES-   -PCF
                        SULZES-   -PCO
                        SULZES-   -PFS
                        SULZES-01-PCO
TANIMCTO T              TANIT -   -MDP
U OF CHICAGO BIOLO
                        U OFOF-   -GUF
                        U OFOF-01-GUF
U OF WASHINGTCN SE
                        U OFOF-   -ACP
UHR L                   UHR L -   -GIP
VANDENBERG SG           VANDSG-   -CPC
                        VANDSG-   -VQR
VANDERPLAS JM           VANDJM-   -CPO
VELDMAN DJ              VELDDJ-   -A
                        VELDDJ-   -APD
                        VELDDJ-   -API
                        VELDDJ-   -C
                        VELDDJ-   -CPG
                        VELDDJ-   -CPP
                        VELDDJ-   -CPT
                        VELDDJ-   -D
                        VELDDJ-   -DPP
                        VELDDJ-   -FFA
                        VELDDJ-   -FPP
                        VELDDJ-   -GPP
                        VELDDJ-   -LCP
                        VELDDJ-   -GPW
                        VELDDJ-   -LML
                        VELDDJ-   -M
                        VELDDJ-   -MPC
                        VELDDJ-   -MSM
                        VELDDJ-   -RAV
                        VELDDJ-   -RPC
                        VELDDJ-   -RPY
                        VELDDJ-   -S
```

```
                       VELDDJ-   -SPO
                       VELDDJ-   -TPC
                       VELDDJ-01-APD
                       VELDDJ-01-CPP
                       VELDDJ-01-FFA
WALKER G               WALKG -   -PIA
WALKER JR              WALKJR-   -PSC
WALTER DO              ADEYWR-   -APD
WAXMAN BD              BONARR-   -GCC
WELFORD NT             BLACCR-   -ACA
WEXLER JD              WEXLJD-   -MSI
WHITTLESEY JRB   WHITJR-   -QQA
WILKES T               WILKT -   -CAS
WILLIAMS BJ            WILLBJ-   -PRT
WOLF R                 WOLFR -   -TPT
YERUSHALMY J           YERUJ -   -PCF
```

PART C

CODE-NAME INDEX

```
ADEYWR-  -APD  ADEY WR              WALTER DO
                  U OF CAL DEPT OF ANATOMY AND PHYSIOLOGY BRAIN
                  RESEARCH INST LOS ANGELES CAL
               APPLICATION OF PHASE DETECTION AND AVERAGING TECHNIQUES
                  IN COMPUTER ANALYSIS OF EEG RECORDS IN THE CAT.=
               (3A) AUTO COVARIANCE AND CROSS SPECTRAL ANALYSIS
                  (3B) CONVERSION OF ANALOG PAPER TAPE RECORDS AT 40
                  SAMPLES PER CHANNEL CONVERSION OF ANALOG MAGNETIC TAPE
                  RECORDS AT 167 POINTS/SEC/CHANNEL (28 CHANNELS MAX)
                  (4) EEG ANALYSIS (5) IBM 7090 (6) EXPER NEUROLOGY VOL 6
                  NO 3 MAR 1963 P 186-209
ANDEBL-  -CLS  ANDERSON BL
               COFIT, A LEAST SQUARES COSINE FITTING PROGRAM.=
               (3A) REGRESSION ANALYSIS (3B) UP TO 500 POINTS OF DATA
                  (5) IBM 704 (6) OTS US DEPT COMMERCE WAPD-TM-26 OCT 1956
ANDEBL-  -EEC  ANDERSON BL
               EXFIT, AN EXPONENTIAL CURVE FITTING PROGRAM.=
               (3A) REGRESSION ANALYSIS (3B) UP TO 500 POINTS (5) IBM 704
                  (6) AMERICAN DOCUMENTATION INST LC WASH DC DOC 5925
BAILKK-  -RA   BAILEY KK
                  STANDARD OIL CO OF CAL
               REGRESSION ANALYSIS.=
               (3A) REGRESSION ANALYSIS (3B) UP TO 39 INDEPENDENT
                  VARIABLES-SOLUTIONS UP TO SIX SIGNIFICANT FIGURES
                  (5) IBM 704 SAP AND FORTRAN II (6) AMERICAN INST OF
                  CHEMICAL ENGINEERS 25 W 45 ST NYC
BAKEFB-  -AED  BAKER FB
                  ANALYSIS OF EXPERIMENTAL DESIGNS BY MEANS OF
                  RANDOMIZATION
               ANALYSIS OF EXPERIMENTAL DESIGNS BY MEANS OF RANDOMIZATION.=
               (3A) EXPERIMENTAL DESIGN, ANALYSIS OF VARIANCE (5) UNIVAC
                  1103, CARD I/O (6) AMERICAN DOCUMENTATION INST PUB
                  PROJECT LC WASH DC DOC 6721
BAKEFB-  -PSP  BAKER FB
               A PROGRAM FOR SCALING OF PSYCHOLOGICAL INVENTORIES BY THE
                  METHOD OF RECIPROCAL AVERAGES.=
               (3B) UP TO 504 ITEM CHOICES-UP TO 767 SUBJECTS
                  (4) PSYCHOLOGY (5) UNIVAC COMPUTER (6) BEHAVIORAL
                  SCIENCE VOL 5 P 269 JULY 1960
BAKEFB-  -PTS  BAKER FB
               A PROGRAM FOR TEST SCORING AND ITEM ANALYSIS.=
               (3B) UP TO 504 ITEM CHOICES-UP TO 7 CHOICES PER ITEM-UP
                  TO 767 SUBJECTS (4) TEST SCORING AND ITEM ANALYSIS
                  (5) UNIVAC COMPUTER CARDS (6) AMERICAN DOCUMENTATION
```

```
                      INST LC WASH DC; DOC 5931
EALIJL-  -MPC    BALINTFY JL
                      TULANE U SCHCOL OF BUSINESS NEW ORLEANS LA
                 MENU PLANNING BY CCMPUTER.=
                 (3A) LINEAR PROGRAMMING--DUAL SIMPLEX ALGORITHM (4) MENU
                    PLANNING (5) IBM 1410, 40K, FORTRAN
BALLWE-  -NLR    BALL WE
                      U OF WASHINGTON SEVER INST OF TECH ST LOUIS MO--(PR LIB)
                      U OF WASHINGTON COMPUTING FACILITIES
                 NON-LINEAR REGRESSION SUBROUTINE.=
                 (3A) REGRESSION ANALYSIS (3B) USER MUST SUPPLY TWO
                    ADDITIONAL SUBPROGRAMS WHICH EVALUATE FUNCTION AND
                    ITS PARTIAL DERIVATIVES (5) FORTRAN SUBROUTINE
BECKP -  -HGH    BECK P
                      U OF WASHINGTON SCHOOL OF MED ST LOUIS MC
                 A HUMAN GROWTH HORMONE ASSAY PROGRAM.=
                 (3A) CURVE FITTING (3B) MAX NO OF DIFFERENT BACKGROUND
                    COUNTS DETERMINATION 20 (5) IBM 7072, 10K, FLAG SYSTEM
BECKSL-  -PKS    DECKER SL
                 A PROGRAM FOR KENDALL'S TAU.=
                 (3A) STATISTICS (3B) UP TO 190 TAUS, UP TO 20 VARIABLES,
                    UP TO 1200 OBSERVATICNS (4) PSYCHOLOGY (5) BASIC IBM 650
                    (6) DOC 6277 AMERICAN DOCUMENTATION INST
BEJAGG-  -NLR    BEJARANO GG
                 NON-LINEAR REGRESSION BY CRITERION OF LEAST SQUARES.=
                 (3A) REGRESSION BY MODIFIED GAUSSIAN PROCEDURE
                    (5) DATATRON 205, 4K CARD I/O, FLOATING POINT DATATRON
                    205 MACHINE CODE (6) AMERICAN INST OF CHEMICAL ENG
                    25 W 45 ST NYC
BENDAW-  -ACC    BENDIG AW
                      U OF PITTSBURGH PITTSBURGH PA
                 AN AUTO AND CROSS CORRELATION PROGRAM.=
                 (3A) CORRELATION (3B) UP TO 135 READINGS FOR A 3 DIGIT
                    DATA, UP TO 600 READINGS FOR A 1 DIGIT DATA, UP TO 20
                    LAGS FOR AUTO CORRELATION COEFF FROM 20 TO 20 LAGS FOR
                    CROSS CORRELATION COEFF (4) EEG ANALYSIS--ANALYSIS CF
                    PAIRED MEASUREMENTS (5) IBM 7070, 5K, FLOATING POINT,
                    I/O TAPE UNITS OF ONLINE CARD READER AND PRINTER
                    AUTO CODER (6) AVAILABLE FROM IBM
BENDAW-  -IAP    BENDIG AW
                      U OF PITTSBURGH PITTSBURGH PA
                 ITEM ANALYSIS PROGRAM II.=
                 (3A) PATTERN ANALYSIS (3B) UP TO 600 TEST ITEMS UP TO 10
                    SUBSCALES (4) SCORE OR ITEM ANALYSIS (5) IBM 7070, 10K,
                    FLOATING POINT HARDWARE TWO ONLINE TAPE UNITS OR AN
                    ONLINE CARD READER, PRINTER AND CARD PUNCH--LOCALLY
                    MODIFIED AUTO CODER (6) AVAILABLE FROM IBM
BENDAW-  -OFS    BENDIG AW
                      U OF PITTSBURGH PITTSBURGH PA
                 AN ORTHOGONAL FACTOR SIMILARITY PROGRAM.=
                 (3A) LEAST SQUARES CRITERION OF AHMAVAARA (3B) VARIABLES
                    MUST BE IDENTICAL IN BOTH MATRICES UP TO 130 VARIABLES
                    UP TO 13 FACTORS PER MATRIX (5) IBM 7070, 10K, FLOATING
                    POINT, I/O TAPE OR ONLINE CARD READER AND PRINTER
```

```
                     MODIFIED AUTOCODER (6) IBM
BENDAW-  -PNV   BENDIG AW
                     U OF PITTSBURGH PITTSBURGH PA
                A PROGRAM FOR NORMALIZED VARIMAX FACTOR ROTATION.=
                (3A) FACTOR ANALYSIS (3B) UP TO 130 VARIABLES UP TO 20
                   FACTORS (4) PSYCHOLOGY (5) IBM 7070, 10K, FLOATING POINT
                   ONLINE CARD READER, OPTIONAL TAPE UNITS, FOUR TAPE
                   AUTOCODER
BENDAW-  -PPA   BENDIG AW
                     U OF PITTSBURGH PITTSBURGH PA
                A PROGRAM FOR PRINCIPAL AXIS FACTOR ANALYSIS.=
                (3A) FACTOR ANALYSIS (PRINCIPAL AXIS) (3B) UP TO 130
                   VARIABLES (4) PSYCHOLOGY (5) IBM 7070, 10K, FLOATING
                   POINT ONLINE CARDREADER AND PRINTER OR TAPE UNITS.
                   FOUR TAPE AUTOCODER
BENDAW-  -RRP   BENDIG AW
                     U OF PITTSBURGH PITTSBURGH PA
                A RATER RELIABILITY PROGRAM.=
                (3A) ANALYSIS OF VARIANCE (TWO WAY) (3B) UP TO 600
                   SUBJECTS, UP TO 1000 RATERS (4) PSYCHOLOGY, TESTING
                   (5) IBM 7070, 5 OR 10K, TAPE UNITS AND (OPTIONAL)
                   ONLINE CARD READER PRINTER. MODIFIED FOUR TAPE AUTOCODER
                   (6) CONDENSED OBJECT DECK AND TEST PROBLEM AVAILABLE
                   FROM AUTHOR
BENDAW-  -SDS   BENDIG AW
                     U OF PITTSBURGH PITTSBURGH PA
                A SINGLE DIGIT SCORE CORRELATION PROGRAM.=
                (3A) CORRELATION (3B) UP TO 130 VARIABLES, SINGLE DIGIT
                   RESPONSES, CAN BE ADAPTED TO A 5K COMPUTER, MATRIX
                   IS THEN LIMITED TO 85 VARIABLES (5) IBM 7070, 10K,
                   FLOATING DECIMAL, TAPE UNITS MODIFIED AUTOCODER 74
                   (6) AVAILABLE FROM IBM BEHAVIORAL SCIENCE VOL 8 P 84,
                   JAN 1963
BENDAW-  -TTP   BENDIG AW
                     U OF PITTSBURGH PITTSBURGH PA
                A T-TEST PROGRAM FOR INDEPENDENT GROUPS.=
                (3A) TEST OF HYPOTHESES (3B) UP TO 999 VARIABLES--INPUT
                   1-3 DIGIT SCORES (5) IBM 7070, 10K, FLOATING POINT,
                   ONLINE CARD READER PRINTER MODIFIED FOUR TAPE AUTOCODER
                   (6) BEHAVIORAL SCIENCE VOL 7 P 262 APRIL 1962
BENDAW-01-IAP   BENDIG AW
                     U OF PITTSBURGH PITTSBURGH PA
                AN ITEM ANALYSIS PROGRAM FOR THE STRONG VOCATIONAL
                   INTEREST BLANK.=
                (3A) PATTERN ANALYSIS (3B) A TOTAL OF 14,400 CORRELATIONS 01
                   CAN BE PRINTED OUT (4) ITEM ANALYSIS (5) IBM 7070, 10K,
                   FLOATING POINT, ONLINE CARD READER AND PRINTER MODIFIED
                   FOUR TAPE AUTOCODER (6) OBJECT DECK AND DESCRIPTION OF
                   PROGRAM AVAILABLE FROM U OF PITTSBURGH COMPUTATION AND
                   DATA PROCESSING CTR
BENDAW-02-IAP   BENDIG AW
                     U OF PITTSBURGH PITTSBURGH PA
                AN ITEM ANALYSIS PROGRAM.=
                (3A) ITEM ANALYSIS CORRELATION (3B) SINGLE DIGIT ITEM     02
```

```
                    RESPONSES (0-9) UP TO 600 ITEMS, 3 CRITERION MEASURES,
                    UP TO 10,000 SUBJECTS (4) ITEM ANALYSIS (5) IBM 7070,
                    10K, FLOATING-DECIMAL, TAPE UNITS OR ONLINE CARD
                    READER, PRINTER AND PUNCH MODIFIED AUTOCODER
                    (6) AVAILABLE FROM IBM
BLACCR-   -ACA    BLACK CR              WELFORD NT
                    FELS RESEARCH INSTITUTE YELLOW SPRINGS O
                  THE ANALYSIS OF CARDIAC ARRHYTHMIA UTILIZING THE SETAR
                    MARK III AND IBM 1620 COMPUTER.=
                    (4) CARDIAC ARRHYTHMIA ANALYSIS (5) IBM 1620, 60K,
                    8 CHANNEL PAPER TAPE FORTRAN II
BONARR-   -GCC    BONATO RR            WAXMAN BD
                    DEPT HEALTH EDUCATION WELFARE NIH WASHINGTON DC
                  A GENERAL CROSS CLASSIFICATION AND TABULATING PROGRAM.=
                  (3B) UP TO 9999 CASE INPUT TAPE OR CARDS UP TO 20
                    VARIABLES IN CYCLE, CROSS CLASSIFICATION IS MADE IN
                    TERMS OF 2, 3 OR 4 FOLD TABLES (4) TABULATION OF DATA
                    (5) IBM 704 FORTRAN (6) BONATO RR AND WAXMAN BD
                    'A GENERAL CROSS CLASSIFICATION PROGRAM FOR DIGITAL
                    COMPUTERS' BEHAVIORAL SCIENCE VOL 6 OCT 1961
BRAUML-   -SDA    BRAUNSTEIN ML
                  SEQUENTIAL DEPENDENCIES ANALYSIS TO MEASURE REDUNDANCIES
                    IN SEQUENCES OF STIMULI OR RESPONSES.=
                    (5) IBM 704 FORTRAN II (6) PHOTODUPLICATION SVCE LC
                    WASH DC DOC 6720
BRIDDA-   -EDD    BRIDGER DA
                    WASHINGTON U SEVER INSTITUTE OF TECH ST LOUIS MO
                    --(PR LIB) WASHINGTON U COMPUTING FACILITIES
                  AN EEG DIGITAL DATA PREPARATION PROGRAM.=
                  (3B) 640 OR 320 POINTS/SEC CONVERTS ONE CHANNEL PER RUN
                    (5) IBM 1710/1311, 1711 MODEL II  1794 MULTIPLEXER AND
                    TERMINAL, AMPEX FR 1300 ANALOG TAPE UNIT. MONITOR I ON
                    1620 FORTRAN WITH SPS SUBROUTINES
BRIDDA-   -SSA    BRIDGER DA
                    U OF WASHINGTON SEVER INST OF TECH ST LOUIS MO--
                    (PR LIB) WASHINGTON U COMPUTER CTR
                  SAS, STATISTICAL ANALYSIS SYSTEM--A PROGRAM TO PERFORM A
                    PRINCIPAL AXIS FACTOR ANALYSIS USING EITHER THE OBLIMAX
                    OR VERIMAX CRITERION.=
                  (3A) FACTOR ANALYSIS (3B) NO OF OBSERVATIONS LESS THAN
                    10,000, NO OF VARIABLES LESS THAN 72, NO OF TRANSFORMED
                    VARIABLES LESS THAN 100, NO OF FACTORS LESS THAN 21
                    (5) IBM 7072, 10K, 5 OR 6 TAPES ON LINE FLAG MONITOR
                    SYSTEM
BRUNRE-   -GUC    BRUNKE RE
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                  G1-UCM CHI-SQUARE PROGRAM.=
                  (3B) 10 BY 10 MATRIX (5) SPS PROGRAM
CABORA-   -PST    CABOT RA
                    U OF MICHIGAN
                  A PROGRAM FOR SIGNIFICANCE TESTS OF DIFFERENCE BETWEEN
                    MEANS.=
                  (3A) TEST OF HYPOTHESES (3B) DIFFERENT PROCEDURES ARE USED
```

```
                    FOR SMALL OR LARGE SAMPLE DATA AND FOR CORRELATED OR
                    INDEPENDENT MEANS. SAMPLE SIZE UP TO 1000, DIFF BETWEEN
                    MEANS LESS THAN 1024 (5) LGP30 (6) ADI AUXILIARY PUB
                    PROJECT LC WASH DC DOC 6722
CAMPDP-  -PMC   CAMPBELL DP
                A PROGRAM FOR MONTE CARLO TRIALS ON A LINEAR LEARNING
                    MODEL IN A 2-PERSON SITUATION.=
                (3A) MONTE CARLO TECHNIQUE (5) UNIVAC 1103 WITH RECO II,
                    FLEXIE LOAD AND SUPERSAMPLER ROUTINES (6) WRITE UP--DR
                    DAVID CAMPBELL STUDENT COUNSELING BUREAU U OF MINNESOTA
                    MINNEAPOLIS MINN
CARLJP-  -BPP   CARLOS JP
                    HEALTH RESEARCH INC ALBANY DIV 84 HOLLAND AVE
                    ALBANY NY--(PR LIB) ALBANY MEDICAL COLLEGE COMPUTER CTR
                BIODENT-A PROGRAM TO PRODUCE TABULATIONS AND SUMMARY
                    STATISTICS FROM DENTAL EPIDEMIOLOGIC DATA.=
                (3A) STATISTICS (4) DENTAL EPIDEMIOLOGY (5) IBM 1620
CARLJP-  -IDP   CARLOS JP
                    HEALTH RESEARCH INC ALBANY DIV 84 HOLLAND AVE ALBANY
                    NY--(PR LIB) ALBANY MED COLLEGE COMPUTER CTR
                ISAN-DETERMINATION OF THE PRESENCE OF RADIOACTIVE
                    ISOTOPES BY A QUALITATIVE ANALYSIS OF SAMPLES (WATER, MILK
                    ETC).=
                (3A) DATA ARE SUMMED OVER ENERGY LEVELS CHARACTERISTIC OF
                    EACH ISOTOPE AND ADJUSTED FOR AMBIENT RADIATION, COMPTON
                    EFFECT, ETC (3B) INPUT DATA GENERATED BY A GAMMA-
                    EMISSION COUNTER AND ENERGY SPECTROMETER OUTPUT
                    PICOCURIES/LITER FOR EACH ELEMENT (4) RADIOLOGY
                    (5) IBM 1620
CARLJP-  -P     CARLOS JP
                    HEALTH RESEARCH INC ALBANY DIV 84 HOLLAND AVE ALBANY
                    NY--(PR LIB) ALBANY MED COLLEGE COMPUTER CTR
                PICK.=
                (4) INFORMATION RETRIEVAL OF MED RECORDS--A PROGRAM TO
                    RETRIEVE DEATH RECORDS FOR ANY COMBINATION OF SELECTED
                    CAUSES OF DEATH AND PATIENT CHARACTERISTICS (4) IBM 704,
                    BINARY TAPE FILES
CARLJP-  -PPA   CARLOS JP
                    HEALTH RESEARCH INC ALBANY NY--(PR LIB) ALBANY MED
                    COLLEGE COMPUTER CTR
                PERIMORT--A PROGRAM TO ANALYZE PERINATAL MORTALITY BY
                    SELECTED GESTATIONAL AND DEMOGRAPHIC CHARACTERISTICS.=
                (4) INPUT--FILES OF STILLBIRTHS AND INFANT DEATHS OCCURING
                    IN NY STATE. OUTPUT--VARIOUS COMBINATIONS OF TWELVE
                    VARIABLES (5) IBM 704, MAGNETIC TAPES
CARLJP-  -RPE   CARLOS JP
                    HEALTH RESEARCH INC ALBANY DIV 84 HOLLAND AVE
                    ALBANY NY--(PR LIB) ALBANY MEDICAL COLLEGE COMPUTER CTR
                REPRIT-A PROGRAM TO ESTIMATE RECESSIVE PROPORTIONS OF
                    CHARACTERISTICS.=
                (3A) THE PROGRAM USES HALDANE'S MAXIMUM LIKELIHOOD METHOD
                    SOLVED BY NEWTON-RAPHSON ITERATIONS (4) POPULATION
                    GENETICS STUDIES (5) IBM 1620
CARLJP-  -TIS   CARLOS JP
```

```
                    HEALTH RESEARCH INC ALBANY DIV 84 HOLLAND AVE
                    ALBANY NY--(PR LIB) ALBANY MEDICAL COMPUTER CTR
               TWIN II-A STATISTICAL ANALYSIS OF TWINNING PROGRAM.=
               (3A) STATISTICS (4) DESIGNED TO PERFORM A NUMBER OF
                 STATISTICAL ANALYSES RELATED TO TWINNING INCLUDING
                 ZYGOSITY ESTIMATION, SURVIVORSHIP AND CONCORDANCE FOR
                 A SERIES OF QUALITATIVE CHARACTERISTICS. INPUTS ARE
                 TAPE FILES OF ALL BIRTHS OCCURING IN NY STATE (5) IBM
                 704, MAGNETIC TAPE
CARLJP-   -VLT  CARLOS JP
                    HEALTH RESEARCH INC ALBANY DIV 84 HOLLAND AVE
                    ALBANY NY--(PR LIB) ALBANY MEDICAL COLLEGE COMPUTER CTR
               VESUVIUS/LIFE-TAB-A PROGRAM TO ANALYZE DENTAL CARIES.=
               (4) DENTAL RESEARCH (5) IBM 704
CASEIN-   -SER  CASE INSTITUTE OF TECHNOLOGY COMPUTER CTR AND STATISTICAL
                    LAB
               STATISTICAL EXTENSIONS FOR RUNCIBLE 1.=
               (3A) BASIC STATISTICAL COMPUTATIONS (4) GENERAL
                 (5) IBM 650 (6) DETAILED DESCRIPTION FROM CTR
CAST   -  -BPB  CASTELLAN
                    U OF COLORADO INST OF BEHAVIORAL SCIENCE BOULDER COL
               BISERIAL POINT-BISERIAL CORRELATION PROGRAM.=
               (3A) CORRELATION (3B) UP TO 999 CONTINUOUS OR DISCRETE
                 VARIABLES, UP TO 999,999 SUBJECTS (5) IBM 709/7090
                 (6) AVAILABLE FROM INSTITUTE
CATTRB-   -RPM  CATTELL RB          FOSTER MJ
                    U OF ILL--(PR LIB) U OF ILL STATISTICAL LIBRARY
               THE ROTOPLOT PROGRAM FOR MULTIPLE, SINGLE PLANE, VISUALLY
                 GUIDED ROTATION.=
               (3A) FACTOR ANALYSIS (3B) MAX 52 FACTORS, MAX 124
                 VARIABLES (4) PSYCHOLOGY (5) IBM 7090 (6) CATTEL RB,
                 FOSTER MJ--THE ROTOPLOT PROGRAM FOR MULTIPLE, SINGLE-
                 PLANE, VISUALLY GUIDED ROTATION, BEHAVIORAL SCIENCE
                 VOL 8 APRIL 1963 P 156
CHARM  -  -PTC  CHARAP M
                    EDUCATIONAL TESTING SVCE
               A PROGRAM FOR THE TETRACHORIC CORRELATION.=
               (3A) CORRELATION (TUCKER) (3B) UP TO 100 VARIABLES, UP
                 TO 9999 CASES NO MISSING DATA ALLOWED (5) IBM 650
                 (6) ADI AUXILIARY PUB PROJECT LC WASH DC DOC 6130
CHRIA  -  -HPH  CHRISTOPHER A
                    MIT CIVIL ENGINEERING SYSTEMS LAB CAMBRIDGE MASS
               HIDECS 2--A PROGRAM FOR THE HIERARCHICAL DECOMPOSITION
                 OF A SET WITH AN ASSOCIATED LINEAR GRAPH.=
               (3B) UP TO 252 VARIABLES (5) IBM 709/7090, 32K, FAP
                 (6) BEHAVIORAL SCIENCE VOL 8 APRIL 1963 P 168-170--
                 CIVIL ENGINEERING SYSTEMS LABORATORY, MIT,
                 CAMBRIDGE MASS
CISLPJ-   -LSF  CISLAK PJ
                    U OF PURDUE LAFAYETTE IND
               LEAST SQUARES FIT TO RELAXATION EQUATION.=
               (3A) NEWTON-RAPHSON LEAST SQUARE FIT (3B) UP TO 800
                 OBSERVATIONS (5) DATATRON 205, 4K, CARD I/O, FLOATING
                 POINT (6) BEHAVIORAL SCIENCE VOL 6 P 167-168 APRIL 1961
```

```
CLASRJ-  -LLP   CLASEN RJ
                    RAND CORP SANTA MONICA CAL
                THE LINEAR LOGARITHMIC PROGRAMMING PROBLEM.=
                (3A) MATHEMATICAL PROGRAMMING (4) CHEMICAL EQUILIBRIUM
                    PROBLEMS (5) IBM 7090
CLEMWC-  -CFR   CLEMENTS WC
                COMPUTING FREQUENCY RESPONSE FROM PULSE TESTING DATA
                    USING THE TRAPEZOIDAL RULE FOR NUMERICAL EVALUATION OF
                    THE INTEGRALS.=
                (3B) UP TO 200 INPUT PULSE, UP TO 200 OUTPUT PULSE
                    (5) IBM 650, 2K BELL LANGUAGE (6) AMERICAN INST OF
                    CHEMICAL ENG 25 W 45 ST NYC
CLEMWC-01-CFR   CLEMENTS WC
                COMPUTING FREQUENCY RESPONSE FROM PULSE TESTING DATA
                    USING FILON'S FORMULA FOR NUMERICAL EVALUATION OF THE
                    INTEGRALS.=
                (3B) UP TO 200 INPUT PULSE, UP TO 200 OUTPUT PULSE      01
                    (5) IBM 650, 2K BELL INTERPRETIVE LANGUAGE (6) AMERICAN
                    INST OF CHEM ENGRS 25 W 45 ST NYC
CRAMEN-  -GCP   CRAMER EN
                    BIOMETRICS BRANCH NIH
                A GENERAL CORRELATION PROGRAM.=
                (3A) CORRELATION (3B) UP TO 10,000 POINTS (5) IBM 650,
                    3TAPES, INDEX REGISTERS
DAMMRA-  -NPS   DAMMKOEHLER RA
                    U OF WASHINGTON SEVER INSTITUTE OF TECH ST LOUIS MO--
                    (PR LIB) U OF WASHINGTON COMPUTING FACILITIES
                A NON-PARAMETRIC STATISTICAL ANALYSIS PROGRAM.=
                (3A) ANALYSIS OF VARIANCE (3B) NUMBER OF VARIABLES BETWEEN
                    2 AND 10 NUMBER OF OBSERVATIONS PER VARIABLE LESS
                    THAN OR EQUAL TO 150 (5) IBM 7072, 10K, 4 TAPES,
                    FORTRAN II (6) SIEGEL'S 'NON-PARAMETRIC STATISTICS',
                    MCGRAW HILL 1960
DANTGB-  -MMH   DANTZIG GB          DEHAVEN JC          COOPER I
                    JOHNSON SM         DELAND EC           KANTER HE
                    SAMS CF
                    RAND CORP SANTA MONICA CAL
                A MATHEMATICAL MODEL OF THE HUMAN EXTERNAL RESPIRATORY
                    SYSTEM.=
                (3A) MATHEMATICAL PROGRAMMING (4) BIOLOGICAL SIMULATIONS
                    (5) IBM 704 (6) PERSPECTIVES IN BIOLOGY AND MED VOL 4
                    NO 3 SPRING 1961
DAS RS-  -PCS   DAS RS
                    BENDIX USER-S EXCHANGE
                A PROGRAM FOR CHI-SQUARE FOR 2X2 CONTINGENCY TABLES,
                    CORRECTED FOR CONTINUITY.=
                (3A) TEST OF HYPOTHESES (3B) FIXED POINT (5) BENDIX G-15D,
                    ALPHANISMERIC TYPEWRITER, FLEXOWRITER MACHINE LANGUAGE
DAS RS-  -UPP   DAS RS
                    BENDIX USERS EXCHANGE
                USERS PROJECT 648-2--A PROGRAM FOR SYMMETRIC AND
                    NONSYMMETRIC CORRELATION MATRICES OF DATA WITH MISSING
                    VALUES.=
                (3A) CORRELATION (3B) FIXED POINT SINGLE PRECISION
```

```
                        ARITHMETIC MAX VALUE ON ANY VARIABLE IS 999 (5) BENDIX
                        G-15D, ALPHANOMERIC TYPEWRITER MAGNETIC TAPE UNIT
                        (MTA-2), FLEXOWRITER G-15D MACHINE LANGUAGE
DAYHMC-  -CCP   DAYHOFF MD           LEDLEY RS
                        NATL BIOMED RESEARCH FOUNDATION SILVER SPRING MD
                COMPROTEIN--A COMPUTER PROGRAM TO AID PRIMARY PROTEIN
                        STRUCTURE DETERMINATION.=
                        (3A) PROGRAMMING SYSTEM CONSISTS OF 6 PROGRAMS--MAXLAP,
                        MERGE, PEPT, SEARCH, QLIST, LOGRED (3B) 3 LETTER
                        ABBREVIATIONS FOR AMINOACIDS (4) BIOCHEMISTRY (5) IBM
                        7090, FORTRAN (6) PROC FALL JOINT COMP CONF 1962
                        P 262-274 AND SEQUENCING OF AMINOACIDS IN PROTEINS USING
                        COMPUTER AIDS, RPRT 62072/8710, NATL BIOMED RESEARCH
                        FOUNDATION SILVER SPRING MD JULY 1962
DEPTHE-  -EHN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                        AND H-800 USERS LIBRARIES
                E1-HADM--NBINTR--TABLE LOOKUP AND LINEAR INTERPOLATION
                        ROUTINE.=
                        (5) H-800, 4K
DEPTHE-  -EHP   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                        AND H-800 USERS LIBRARIES
                E2-HADF-POLFOTP--LEAST SQUARES POLYNOMIAL FIT.=
                        (3A) CURVE FITTING (5) H-800, 8K
DEPTHE-  -EHT   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                        AND H-800 USERS LIBRARIES
                E1-HADM-TEAARD--A THREE POINT SECOND DEGREE LAGRANGIAN
                        POLYNOMIAL CURVE FIT PROGRAM.=
                        (3A) CURVE FITTING (3B) INPUT VIA CARD READER
                        (5) H-800, 4K
DEPTHE-  -ENN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                EA-NIH-NIH110--FOURIER ANALYSIS, A PROGRAM TO COMPUTE
                        THE VALUES OF THE FOURIER SERIES AT A GIVEN NUMBER OF
                        EQUALLY SPACED POINTS.=
                        (3A) FOURIER ANALYSIS (5) H-800
DEPTHE-  -FHN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                F1-HADM-NAMULT REAL AND COMPLEX MATRIX MULTIPLICATION.=
                        (3A) MATRIX ALGEBRA (5) H-800, 4K
DEPTHE-  -FHS   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                F4-HADM-SHINVR A PROGRAM TO SOLVE SIMULTANEOUS
                        EQUATIONS.=
                        (3A) MATRIX ALGEBRA (3B) REAL MATRIX (5) H-800, 4K
DEPTHE-  -FNN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                F1-NIH-NIH004 A PROGRAM TO TRANSFORM A MATRIX INTO
                        NEARLY A TRIANGULAR MATRIX BY SIMILARITY TRANSFORMATIONS.=
                        (3A) MATRIX ALGEBRA (5) H-800, 4K                          0
DEPTHE-  -GHA   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                G2-HADF-ACSASM AUTOCORRELATION AND SPECTRAL ANALYSIS.=
                        (3A) AUTOCORRELATION AND POWER SPECTRAL ANALYSIS
                        (3B) OPTIONS (1) REMOVAL OF A VARIABLE TIME INCREMENT
```

```
                        FROM INPUT (2) REMOVAL OF LINEAR TREND OR MEAN FROM
                        INPUT (4) EEG ANALYSIS (5) H800, 8K
DEPTHE-   -GHC    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                        AND H-800 USERS LIBRARIES
                  G1-HEDP-CORANL-A PROGRAM FOR STATISTICAL DATA REDUCTION.=
                        (5) H-800, 8K
DEPTHE-   -GNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                  G2-NIH-NIH015G--- A PROGRAM TO PERFORM A PRINCIPLE
                        COMPONENT FACTOR ANALYSIS AND VARIMAX ROTATION ON A
                        CORRELATION MATRIX.=
                        (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) H-800
DEPTHE-   -HNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                  H1-NIH-NIH119--LINEAR PROGRAMMING (SIMPLEX METHOD).=
                        (3A) MATHEMATICAL PROGRAMMING (5) H-800
DEPTHE-01-EHN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                        AND H-800 USERS LIBRARIES
                  E1-HADM-N8BIVA--LAGRANGIAN BIVARIATE INTERPOLATION, A
                        PROGRAM TO FIT A PLANE TO DISCRETE VALUES OF A FUNCTION
                        OF TWO VARIABLES.=
                        (3A) PLANE FITTING (5) H-800, 4K                          01
DEPTHE-01-EHT    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                        AND H-800 USERS LIBRARIES
                  E1-HADM-TEDUBL--LAGRANGIAN BIVARIATE INTERPOLATION, A
                        PROGRAM TO FIT A PLANE TO DISCRETE VALUES OF A FUNCTION OF
                        TWO VARIABLES.=
                        (3A) PLANE FITTING (5) H-800, 4K                          01
DEPTHE-01-ENN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                        AND H-800 USERS LIBRARIES
                  E2-NIH-NIH122--NONLINEAR LEAST SQUARES PROGRAM.=
                        (3A) LEAST SQUARES REGRESSION (5) H-800                    01
DEPTHE-01-FHN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                  F3-HADM-NADETR A PROGRAM TO EVALUATE DETERMINANTS OF
                        REAL AND COMPLEX MATRICES.=
                        (3A) MATRIX ALGEBRA (5) H-800, 4K                          01
DEPTHE-01-GNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                  G2-NIH-NIH020G FACTOR ANALYSIS (MAXIMUM LIKELIHOOD
                        METHOD).=
                        (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) H-800 (6) MAXWELL 01
                        AND LAWLEY'S ALGORITHM
DEPTHE-02-EHN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                        AND H-800 USERS LIBRARIES
                  E1-HADM-NAINTP--MULTIVARIATE LINEAR INTERPOLATION.=
                        (3A) REGRESSION ANALYSIS (3B) 2-6 INDEPENDENT VARIABLES    02
                        (5) H-800, 4K
DEPTHE-02-FHN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                  F4-HADM-NAINVS INVERSION OF REAL OR COMPLEX MATRICES.=
                        (3A) MATRIX ALGEBRA (5) H-800, 4K                          02
DEPTHE-02-FNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
```

```
                     F1-NIH-NIH005 MATRIX INVERSION-SOLUTION OF LINEAR
                        EQUATIONS.=
                     (3A) MATRIX ALGEBRA (5) H-800                        02
DEPTHE-02-GNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                     G2-NIH-NIH022G-A PROGRAM TO TEST WHETHER SOME SPECIFIC
                        PATTERN OF LOADINGS FITS A GIVEN COVARIANCE OR
                        CORRELATION MATRIX.=
                     (3A) FACTOR ANALYSIS (MAXIMUM LIKELIHOOD) (5) H-800   02
DEPTHE-03-FHN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                     F4-HADM-NBMATX INVERSION OF A REAL NONSINGULAR SQUARE
                        MATRIX.=
                     (3A) MATRIX ALGEBRA (3B) SINGULAR MATRICES ARE INDICATED  03
                        (5) H-800, 4K
DEPTHE-03-FNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                     F1-NIH-NIH012 MATRIX INVERSION.=
                     (3A) MATRIX ALGEBRA (3B) INVERTS A NXN MATRIX STORED    03
                        IN AN MXJ STORAGE BLOCK (5) H-800
DEPTHE-03-GNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                     G2-NIH-NIH024G LAWLEY MAXIMUM LIKELIHOOD ESTIMATE OF
                        FACTOR LOADINGS.=
                     (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) H-800          03
DEPTHE-04-FNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                     F2-NIH-NIH003F EIGENVALUES-VECTORS AND MATRIX
                        MULTIPLICATIONS.=
                     (3B) SYMMETRIC MATRIX OR A SET OF SYMMETRIC SUBMATRICES  04
                        (5) H-800
DEPTHE-04-GNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                     G5-NIH-NIH015-A SUBROUTINE TO GENERATE A CHI-SQUARE
                        DEVIATE WITH R DEGREES OF FREEDOM.=
                     (3A) CHI-SQUARE DISTRIBUTION (5) H-800                 04
DEPTHE-05-FNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                     F2-NIH-NIH007 A PROGRAM TO COMPUTE THE EIGENVECTORS FROM
                        THE REAL EIGENVALUES OF A MATRIX.=
                     (3A) MATRIX ALGEBRA (5) H-800                          05
DEPTHE-05-GNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                     G6-NIH-NIH021--A PROGRAM TO COMPUTE INDIVIDUAL AND
                        TOTAL CHI-SQUARE DISTRIBUTIONS.=
                     (3A) PROBABILITY (5) H-800                             05
DEPTHE-06-FNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
                     F2-NIH-NIH008 EIGENVALUES-VECTORS OF A REAL SYMMETRIC
                        MATRIX BY THE JACOBI METHOD.=
                     (3A) MATRIX ALGEBRA (3B) MATRIX MAY BE COMPOSED OF AS   06
                        MANY AS 12 SUBMATRICES
DEPTHE-06-GNN    DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB)
                        NIH AND H-800 USERS LIBRARIES
```

```
                G2-NIH-NIH013G--A PROGRAM TO SELECT THE MINIMUM NUMBER
                   OF INDEPENDENT VARIABLES TO PREDICT DEPENDENT VARIABLE.=
                (3A) REGRESSION ANALYSIS (5) H-800                        22
DEPTHE-23-GNN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                   AND H-800 USERS LIBRARIES
                G2-NIH-NIH012G--A PREDICTED VALUES PROGRAM TO SELECT
                   FOR EACH VARIABLE SPECIFIED INDEPENDENT VARIABLES
                   IN ORDER TO PREDICT A DEPENDENT VARIABLE.=
                (3A) REGRESSION ANALYSIS (5) H-800                        23
DEPTHE-24-GNN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                   AND H-800 USERS LIBRARIES
                G2-NIH-NIH014G--MULTIPLE REGRESSION.=
                (3A) REGRESSION ANALYSIS (5) H-800                        24
DEPTHE-25-GNN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                   AND H-800 USERS LIBRARIES
                G2-NIH-NIH023G-PRINCIPLE OF PARSIMONY IN MULTIPLE
                   REGRESSION.=
                (3A) REGRESSION ANALYSIS (4) PSYCHOLOGY (5) H-800         25
DEPTHE-26-GNN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                   AND H-800 USERS LIBRARIES
                G2-NIH-NIH147-POLYNOMIAL REGRESSION BY ORTHOGONAL
                   POLYNOMIALS.=
                (3A) REGRESSION ANALYSIS (3B) EQUALLY SPACED DATA POINTS  26
                   (5) H-800
DEPTHE-27-GNN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                   AND H-800 USERS LIBRARIES
                G1-NIH-NIH002G-A PERCENTILE COMPUTATIONS PROGRAM.=
                (3A) DESCRIPTIVE STATISTICS (3B) WILL COMPUTE FREQUENCIES,27
                   INTERVAL AVERAGES, MEANS, STANDARD DEVIATIONS, MODES,
                   MEDIANS, QUARTILES AND DECILES (5) H-800
DEPTHE-28-GNN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                   AND H-800 USERS LIBRARIES
                G1-NIH-NIH003G-TWO AND THREEWAY CROSSTABULATIONS OF
                   FREQUENCIES AND PERCENTAGE.=
                (3A) DESCRIPTIVE STATISTICS (5) H-800                     28
DEPTHE-29-GNN   DEPT HEALTH EDUCATION WELFARE PHS BETHESDA MD--(PR LIB) NIH
                   AND H-800 USERS LIBRARIES
                G1-NIH-NIH005G-DATA SCREENING A PROGRAM TO TEST RAW
                   INPUT DATA TO FIND THE FORM OF THEIR DISTRIBUTION,
                   FREQUENCIES AND RANGES.=
                (3A) DATA SCREENING (5) H-800                             29
DICKAW-  -PGA  DICKINSON AW
                   MONSANTO CHEMICAL CO ST LOUIS MO
                A PROGRAM FOR GENERAL ANALYSIS OF VARIANCE.=
                (3A) ANALYSIS OF VARIANCE (5) IBM 704, 8K, 1 TAPE,
                   FORTRAN II (6) AMERICAN INST OF CHEM ENG 25 W 45 ST NYC
DICKKW-  -KAP  DICKMAN KW
                   U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                   OF THE ILLIAC
                KSL 2.93--AGREEMENT PATTERNS, FORM G, A PROGRAM THAT
                   COMPUTES JOINT AGREEMENT PATTERNS.=
                (3A) AGREEMENT ANALYSIS (4) PSYCHOLOGY, ANALYSIS OF
                   PATTERNS OF BEHAVIOR (5) ILLIAC (6) BEHAVIORAL SCIENCE
                   VOL 4 JULY 1959
```

```
DICKKW-   -KAS   DICKMAN KW
                    U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                    OF THE ILLIAC
                 KSL 2.90--AGREEMENT SCORES, FORM A, A PROGRAM THAT WILL
                    CALCULATE AND PRINT A MATRIX OF AGREEMENT SCORES
                    AMONG A SET OF PERSONS.=
                 (3A) AGREEMENT ANALYSIS (4) PSYCHOLOGY, ANALYSIS OF
                    PATTERN OF BEHAVIOR (5) ILLIAC (6) BEHAVIORAL SCIENCE
                    VOL 4 JULY 1959 P 251-254
DICKKW-   -KCS   DICKMAN KW
                    U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                    OF THE ILLIAC
                 KSL 2.61--CHI-SQUARE FOR A SET OF FREQUENCY TABLES.=
                 (3B) THE TOTAL FREQUENCY FOR EACH TABLE MUST NOT EXCEED
                    1,000,000,000 (4) PSYCHOLOGY (5) ILLIAC (6) BEHAVIORAL
                    SCIENCE VOL 4 JULY 1959 P 251-254
DICKKW-   -KDC   DICKMAN KW
                    U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                    OF THE ILLIAC
                 KSL 2.40, DICHOTOMOUS COEFFICIENTS.=
                 (3B) UP TO 159 VARIABLES, UP TO 2535 OBSERVATIONS
                    (5) ILLIAC (6) BEHAVIORAL SCIENCE VOL 4 JULY 1959
                    P 251-254
DICKKW-   -KDS   DICKMAN KW
                    U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                    OF THE ILLIAC
                 KSL 2.70--A D-STATISTIC PROGRAM TO CALCULATE
                    INTERDESCRIPTION INDICES.=
                 (3B) NO OF ITEMS PER DESCRIPTION UP TO 100--NO OF
                    DESCRIPTIONS UP TO 12 (4) PSYCHOLOGY (5) ILLIAC
                    (6) BEHAVIORAL SCIENCE VOL 4 JULY 1959 P 251-254
DICKKW-   -KFD   DICKMAN KW
                    U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                    OF THE ILLIAC
                 KSL 4.00-FREQUENCY DISTRIBUTIONS.=
                 (5) ILLIAC (6) BEHAVIORAL SCIENCE VOL 4 JULY 59 P 252-254
DICKKW-   -KFS   DICKMAN KW
                    U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                    OF THE ILLIAC
                 KSL 2.50--FISHER'S Z TRANSFORMATION PROGRAM TO TEST THE
                    SIGNIFICANCE OF DIFFERENCES BETWEEN CORRELATIONS.=
                 (3A) TEST OF HYPOTHESES (5) ILLIAC (6) BEHAVIORAL SCIENCE
                    VOL 4 JULY 1959 P 251-254
DICKKW-   -KHO   DICKMAN KW
                    U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY OF
                    THE ILLIAC
                 KSL 2.30-HIGHER ORDER PARTIAL CORRELATIONS.=
                 (3A) CORRELATION (5) ILLIAC (6) BEHAVIORAL SCIENCE VOL 4
                    JULY 1959 P 251-254
DICKKW-   -KKA   DICKMAN KW
                    U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                    OF THE ILLIAC
                 KSL 2.15 K-5 AUTO CORRELATION.=
                 (3B) UP TO 795 OBSERVATIONS (5) ILLIAC (6) BEHAVIORAL
```

```
                      SCIENCE VOL 4 JULY 1959 P 251-254
DICKKW-   -KKC   DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY OF
                      THE ILLIAC
                 KSL 2.05, K-9-CORRELATIONS, MEANS, STANDARD DEV,
                 COVARIANCES IN LOGARITHMIC SCALE.=
                 (3A) BASIC STATISTICS (3B) UP TO 35 VARIABLES (5) ILLIAC
                 (6) BEHAVIORAL SCIENCE VOL 4 JULY 1959 P 252-254
DICKKW-   -KKL   DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY OF
                      THE ILLIAC
                 KSL 4.40, K-3--A LEAST SQUARES FIT OF A POLYNOMIAL TO A
                 SET OF N WEIGHTED POINTS.=
                 (5) ILLIAC (6) BEHAVIORAL SCIENCE VOL 4 JULY 1959
                 P 252-254
DICKKW-   -KKM   DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY OF
                      THE ILLIAC
                 KSL 2.20, K-14--MULTIPLE REGRESSION WITH TRANSFORMATIONS=
                 (3A) REGRESSION (3B) UP TO 50 VARIABLES, NUMBER OF
                 NONELIMINATED VARIABLES IS LIMITED TO 22 (5) ILLIAC
                 (6) BEHAVIORAL SCIENCE VOL 4 JULY 1959 P 251-254
DICKKW-   -KKP   DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                      OF THE ILLIAC
                 KSL 2.00, K-8-PRODUCT-MOMENT CORRELATIONS, VARIANCE-
                 COVARIANCES MEANS AND STD DEVIATIONS.=
                 (3A) CORRELATION (3B) UP TO 144 VARIABLES (5) ILLIAC
                 (6) BEHAVIORAL SCIENCE VOL 4 JULY 1959 P 252-254
DICKKW-   -KLI   DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY OF
                      THE ILLIAC
                 KSL 4.50--A LIMITED INFORMATION ESTIMATION, SINGLE
                 EQUATION PROGRAM.=
                 (3B) MATRIX UP TO ORDER 14 (5) ILLIAC (6) BEHAVIORAL
                 SCIENCE VOL 4 JULY 1959 P 252-254
DICKKW-   -KML   DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                      OF THE ILLIAC
                 KSL 4.80, M-15-LINEAR PROGRAMMING.=
                 (3A) LINEAR PROGRAMMING (5) ILLIAC (6) BEHAVIORAL SCIENCE
                 VOL 4 JULY 1959 P 252-254
DICKKW-   -KPT   DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY OF
                      THE ILLIAC
                 KSL 4.10--A PROGRAM TO TRANSFORM RAW SCORES TO STANDARD
                 SCORES.=
                 (3B) UP TO 145 VARIABLES (4) PSYCHOLOGY (5) ILLIAC
                 (6) BEHAVIORAL SCIENCE VOL 4 JULY 1959 P 252-254
DICKKW-   -KRA   DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                      OF THE ILLIAC
                 KSL 2.91--RANKED AGREEMENT SCORES, FORM F, A PROGRAM WHICH
                 WILL PRINT ONLY THE HIGH AGREEMENTS PER PERSON.=
```

```
                    (3A) AGREEMENT ANALYSIS (4) PSYCHOLOGY, ANALYSIS OF
                      PATTERNS OF BEHAVIOR (5) ILLIAC (6) BEHAVIORAL SCIENCE
                      VOL 4 JULY 1959
DICKKW-01-KAP    DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                      OF THE ILLIAC
                 KSL 2.94--AGREEMENT PATTERNS, FORM H, THIS PROGRAM FINDS
                    THE HIGHEST AGREEMENT SCORE AMONG ALL THE PERSONS OF A
                    POPULATION.=
                    (3A) AGREEMENT ANALYSIS (4) PSYCHOLOGY, ANALYSIS OF        01
                      PATTERNS OF BEHAVIOR (5) ILLIAC (6) BEHAVIORAL SCIENCE
                      VOL 4 JULY 1950
DICKKW-01-KCS    DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                      OF THE ILLIAC
                 KSL 4,20-CONSTRUCT SAMPLES FROM A NORMAL DISTRIBUTION
                    WITH SPECIFIED MEANS, COVARIANCES AND SERIAL TREND.=
                    (5) ILLIAC (6) BEHAVIORAL SCIENCE VOL 4 JULY 59 P 252-254 01
DICKKW-01-KPT    DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                      OF THE ILLIAC
                 KSL 4.05-A PROGRAM THAT WILL READ A GROUP OF SETS OF
                    NUMBERS AND EXTRACT THE LARGEST POSITIVE AND SMALLEST
                    NEGATIVE VALUES.=
                    (3B) NUMBER WITHIN A SET UP TO 700 (5) ILLIAC            01
                      (6) BEHAVIORAL SCIENCE VOL 4 JULY 59 P 252-254
DICKKW-02-KCS    DICKMAN KW
                      U OF ILL CHICAGO ILL--(PR LIB) STATISTICAL LIBRARY
                      OF THE ILLIAC
                 KSL 2.60--CHI-SQUARE FOR DICHOTOMOUS DATA.=
                    (3A) TEST OF HYPOTHESES (5) ILLIAC (6) BEHAVIORAL SCIENCE 02
                      VOL 4 JULY 1959 P 251-254
DIECWL-   -PPE   DIECKMANN WL
                      RESEARCH CORP CAL MATHEMATICAL SERVICES GROUP
                      RICHMOND CAL
                 A PROGRAM FOR POLYNOMIAL EQUATION FITTING.=
                    (3A) REGRESSION (3B) UP TO 19TH DEGREE EQ (5) DATATRON 205
                      4K, CARD I/O, FLOATING POINT DATATRON 205 MACHINE
                      LANGUAGE (6) AMERICAN INST OF CHEM ENGRS 25 W 45 ST NYC
DIXOWJ-   -BBA   DIXON WJ
                      U OF CAL SCHOOL OF MED LOS ANGELES--(PR LIB) HEALTH
                      SCIENCES COMPUTING FACILITY
                 BMD035, BIOLOGICAL ASSAY-PROBIT ANALYSIS.=
                    (3A) MAXIMUM LIKELIHOOD ANALYSIS (3B) UP TO 1000 DOSES
                      OUTPUT INCLUDES SAMPLE PROBIT AND PROBABILITY,
                      COVARIANCE MATRICES, CHI-SQUARE STATISTIC (5) 7094
                      FORTRAN II (6) BMD BIOMED COMPUTER PROGRAMS UCLA
                      STUDENT STORE LOS ANGELES CAL
DIXOWJ-   -BDC   DIXON WJ
                      U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
                      SCIENCES COMPUTING FACILITY
                 BMD02D (CORRELATION WITH TRANSGENERATION)--A PROGRAM TO
                    COMPUTE SIMPLE CORRELATION COEFFICIENTS, AVERAGES AND
                    MEASURES OF DISPERSION.=
```

(3B) UP TO 150 VARIABLES, UP TO 99,999 CASES, UP TO 99
PLOTS BOOLEAN EXPRESSIONS SELECT INPUT DATA
(5) 7094 FORTRAN (6) BMD BIOMED COMPUTER PROGRAMS
UCLA STUDENT STORE LOS ANGELES CAL

DIXOWJ- -BDD DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD10D, DATA PATTERNS FOR DICHOTOMIES--A PROGRAM TO FIND
FREQUENCIES AND PATTERNS OF ANY ONE PARTICULAR
SPECIFIED CODE IN INPUT DATA.=
(3B) UP TO 30 VARIABLES, UP TO 700 CASES (5) 7094 FORTRAN
II (6) BMD BIOMED COMP PROGRAMS, UCLA STUDENT STORE
LOS ANGELES CAL

DIXOWJ- -BDG DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD05D, GENERAL PLOT INCLUDING HISTOGRAM.=
(3B) ONE PAGE HISTOGRAM WITH A MAX OF 34 INTERVALS, UP TO
500 VARIABLES, UP TO 20,000 CASES (5) 7094 FORTRAN II
(6) BMD BIOMED COMP PROGRAMS, UCLA STUDENT STORE
LOS ANGELES CAL

DIXOWJ- -BDS DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD01D, SIMPLE DATA DESCRIPTION PROGRAM TO COMPUTE
SIMPLE AVERAGES AND MEASURES OF DISPERSION OF VARIABLES.=
(3B) UP TO 999 VARIABLES, UP TO 99,999 CASES (5) 7094
FORTRAN II (6) BMD BIOMED COMP PROGRAMS, UCLA STUDENT
STORE LOS ANGELES CAL

DIXOWJ- -BMC DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD06M, CANONICAL ANALYSIS--A PROGRAM THAT COMPUTES THE
CANONICAL CORRELATIONS BETWEEN TWO SETS OF VARIABLES.=
(3A) CANONICAL ANALYSIS (3B) UP TO 100 ENTERING VARIABLES.
UP TO 9999 CASES. UP TO 35 VARIABLES OF THE FIRST SET.
UP TO 35 VARIABLES OF THE SECOND SET. OUTPUT INCLUDES
SIMPLE CORRELATION MATRIX STANDARD DEVIATIONS CANONICAL
CORRELATIONS (4) BEHAVIORAL SCIENCES CORRELATION
BETWEEN CRITERIA AND PREDICTOR MEASURES (5) 7094
FORTRAN II (6) BMD BIOMED COMPUTER PROGRAMS UCLA
STUDENT STORE LOS ANGELES CAL

DIXOWJ- -BMD DIXON WJ
U OF CAL SCHOOL OF MEDICINE LOS ANGELES CAL--(PR LIB)
HEALTH SCIENCES COMPUTING FACILITY
BMD04M, DISCRIMINANT ANALYSIS FOR TWO GROUPS, A PROGRAM
THAT COMPUTES A LINEAR FUNCTION OF P VARIABLES MEASURED
ON EACH INDIVIDUAL OF TWO GROUPS-THE FUNCTION IS THEN
USED AS AN INDEX FOR DISCRIMINATION BETWEEN THE GROUPS.=
(3A) DISCRIMINANT ANALYSIS (3B) SAMPLE SIZE IN THE ANY
GROUP UP TO 300 NO OF VARIABLES UP TO 25-OUTPUT INCLUDES
MEANS, DISCRIMINANT FUNCTION COEFFICIENTS, ETC
(5) 7094 FORTRAN II (6) BMD BIOMED COMPUTER PROGRAMS UCLA
STUDENT STORE LOS ANGELES CAL

104

```
DIXOWJ-  -BMG   DIXON WJ
                   U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
                   SCIENCES COMPUTING FACILITY
                BMD03M, GENERAL FACTOR ANALYSIS, A PROGRAM THAT PERFORMS
                 A PRINCIPAL COMPONENT SOLUTION AND AN ORTHOGONAL
                 ROTATION.=
                (3A) FACTOR ANALYSIS (3B) UP TO 80 VARIABLES (P), UP TO
                 9999 CASES, UP TO P FACTORS TO BE ROTATED--OUTPUT
                 INCLUDES FACTOR MATRIX, FACTOR CHECK MATRIX, MEANS,
                 CORRELATION MATRIX (4) PSYCHOLOGY (5) 7094 FORTRAN II
                 (6) BMD BIOMED COMPUTER PROGRAMS UCLA STUDENT STORE
                 LOS ANGELES CAL
DIXOWJ-  -BMP   DIXON WJ
                   U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
                   SCIENCES COMPUTING FACILITY
                BMD01M, PRINCIPAL COMPONENT ANALYSIS, PROGRAM THAT COMPUTES
                 PRINCIPAL COMPONENTS OF STANDARDIZED DATA AND RANK
                 ORDERS EACH STANDARDIZED CASE BY THE SIZE OF EACH
                 PRINCIPAL COMPONENT SEPARATELY.=
                (3A) FACTOR ANALYSIS (3B) UP TO 25 VARIABLES, UP TO 400
                 CASES (5) 7094 FORTRAN II (6) BMD BIOMED COMPUTER
                 PROGRAMS UCLA STUDENT STORE LOS ANGELES CAL
DIXOWJ-  -BMR   DIXON WJ
                   U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
                   SCIENCES COMPUTING FACILITY
                BMD02M, REGRESSION ON PRINCIPAL COMPONENTS, A PROGRAM
                 TO COMPUTE THE PRINCIPAL COMPONENTS OF STANDARDIZED
                 DATA AND RANK ORDERS EACH CASE BY THE SIZE OF EACH
                 PRINCIPAL COMPONENT.=
                (3A) FACTOR ANALYSIS (3B) UP TO 25 INDEPENDENT VARIABLES,
                 UP TO 20 DEPENDENT VARIABLES, OUTPUT INCLUDES
                 CORRELATION COEFF, EIGENVALUES, EIGENVECTORS,
                 REGRESSION COEFF ETC (5) 7094 FORTRAN II (6) BMD BICMED
                 COMPUTER PROGRAMS UCLA STUDENT STORE LOS ANGELES CAL
DIXOWJ-  -BRA   DIXON WJ
                   U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
                   SCIENCES COMPUTING FACILITY
                BMD06R, ASYMPTOTIC REGRESSION (LOGISTIC, GOMPERTZ, ETC).=
                (3A) REGRESSION ANALYSIS (3B) UP TO 5000 CASES, 2 INDEP
                 VARIABLES, OUTPUT INCLUDES ANALYSIS OR VARIANCE OF
                 REGRESSIONS, PLOTS (5) 7094 FORTRAN II (6) BMD BIOMEDICAL
                 COMPUTER PROGRAMS UCLA STUDENT STORE LOS ANGELES CAL
DIXOWJ-  -BRM   DIXON WJ
                   U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
                   SCIENCES COMPUTING FACILITY
                BMD03R, MULTIPLE REGRESSION WITH CASE COMBINATIONS, A
                 PROGRAM THAT PERFORMS MULTIPLE REGRESSION AND CORRELATION
                 ANALYSIS ON THE DATA WITHIN SUBSAMPLES OF POPULATION.=
                (3A) REGRESSION ANALYSIS (3B) UP TO 99,999 CASES UP TO
                 50 VARIABLES, UP TO 28 SUBSAMPLES, OUTPUT INCLUDES MEANS,
                 STD DEVIATIONS, COVARIANCE AND CORRELATION MATRIX,
                 PARTIAL CORRELATIONS, ANALYSIS OF VARIANCE OF REGRESSIONS
                 (5) 7094 FORTRAN II (6) BMD BIOMED COMPUTER PROGRAMS
                 UCLA STUDENT STORE LOS ANGELES CAL
```

```
DIXOWJ-  -BRP   DIXON WJ
                   U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
                   SCIENCES COMPUTING FACILITY
                BMD04R, PERIODIC REGRESSION AND HARMONIC ANALYSIS, A
                   PROGRAM THAT FITS BY LEAST SQUARES A TRIGONOMETRIC
                   SERIES UP TO THE NINTH HARMONIC.=
                (3A) REGRESSION ANALYSIS (3B) UP TO 9 HARMONICS. UP TO
                   19 REPLICATIONS. UP TO 99 COVARIATE DATA SETS OUTPUT
                   INCLUDES MEANS, ANALYSIS OF VARIANCE OF REGRESSIONS,
                   RESIDUALS, PLOTS (5) 7094 FORTRAN II (6) BMD BIOMED
                   COMPUTER PROGRAMS-UCLA STUDENT STORE LOS ANGELES CAL
DIXOWJ-  -BRS   DIXON WJ
                   U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
                   SCIENCES COMPUTING FACILITY
                BMD01R, SIMPLE LINEAR REGRESSION, A PROGRAM THAT
                   PROVIDES A RELATIONSHIP BETWEEN A DEPENDENT VARIABLE
                   AND ONE OR MORE INDEPENDENT VARIABLES.=
                (3A) REGRESSION ANALYSIS (3B) 2 ORIGINAL VARIABLES, UP TO
                   999 CASES PER GROUP. OUTPUT INCLUDES DEVIATIONS
                   ABOUT REGRESSION, REGRESSION COEFFICIENTS, F RATIOS
                   COVARIANCE MATRIX, ANALYSIS OF VARIANCE OF REGRESSION
                   (5) 7094 FORTRAN II (6) BMD BIOMED COMPUTER PROGRAMS-
                   UCLA STUDENT STORE LOS ANGELES CAL
DIXOWJ-  -BSC   DIXON WJ
                   U OF CALIFORNIA SCHOOL OF MED LOS ANGELES CAL--(PR LIB)
                   HEALTH SCIENCES COMPUTING FACILITY
                BMD02S, CONTINGENCY TABLE ANALYSIS, PROGRAM TO COMPUTE
                   TWO-WAY FREQUENCY AND PERCENTAGE TABLES, CHI-SQUARES,
                   CONTINGENCY COEFFICIENTS AND MAX LIKELIHOOD RATIOS.=
                (3B) UP TO 22 INTERVALS PER CATEGORIZATION, UP TO 700
                   DIFFERENT CATEGORIZATION, MAX FREQ PER CELL IN TABLES
                   9999 (5) 7094 FORTRAN II (6) BMD BIOMED COMPUTER
                   PROGRAMS UCLA STUDENT STORE LOS ANGELES CAL
DIXOWJ-  -BSG   DIXON WJ
                   U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
                   SCIENCES COMPUTING FACILITY
                BMD04S, GUTTMAN SCALE PREPROCESSOR A PROGRAM THAT
                   PERFORMS THE INITIAL STEPS OF BMD06S AND BMD07S.=
                (3B) UP TO 25 VARIABLES (4) STUDY OF ATTITUDES OPINIONS
                   SYMPTOMS (5) 7094 FORTRAN II (6) BMD BIOMED COMP
                   PROGRAMS REQUEST REPORT FROM UCLA STUDENT STORE
                   LOS ANGELES CAL
DIXOWJ-  -BSL   DIXON WJ
                   U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
                   SCIENCES COMPUTING FACILITY
                BMD01S, LIFE TABLE AND SURVIVAL RATE PROGRAM.=
                (3B) UP TO 51 TIME PERIODS, UP TO 9999 CASES, OUTPUT
                   INCLUDES TABLES AND PLOTS (5) 7094 FORTRAN II (6) BMD
                   BIOMED COMP PROGRAMS UCLA STUDENT STORE LOS ANGELES CAL
DIXOWJ-  -BTA   DIXON WJ
                   U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
                   SCIENCES COMPUTING FACILITY
                BMD01T AMPLITUDE AND PHASE ANALYSIS.=
                (3B) UP TO 5000 POINTS IN SERIES (4) EEG ANALYSIS (5) 7094
```

106

```
                      FORTRAN II (6) BMD BIOMED COMPUTER PROGRAMS UCLA STUDENT
                      STORE LOS ANGELES CAL
DIXOWJ-  -BVA   DIXON WJ
                      U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
                      SCIENCES COMPUTING FACILITY
                BMD03V, ANALYSIS OF COVARIANCE FOR FACTORIAL DESIGN.=
                (3A) ANALYSIS OF COVARIANCE (3B) UP TO 6 CLASSIFICATIONS
                      UP TO 8 COVARIATES UP TO 999 REPLICATES-OUTPUT INCLUDES
                      COVARIANCE MATRIX, REGRESSION COEFF, T-VALUES,
                      F-STATISTIC, RESIDUAL MEAN SQUARE (5) 7094 FORTRAN II
                      (6) BMD BIOMED COMPUTER PROGRAMS UCLA STUDENT STORE
                      LOS ANGELES CAL
DIXOWJ-  -BVG   DIXON WJ
                      U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
                      SCIENCES COMPUTING FACILITY
                BMD05V GENERAL LINEAR HYPOTHESIS.=
                (3A) GENERAL LINEAR HYPOTHESIS (3B) UP TO 60 VARIABLES
                      UP TO 60 COVARIATES OUTPUT INCLUDES MEANS STD DEV
                      ESTIMATES OF REGRESSION COEFF F-TESTS AND DEGREES OF
                      FREEDOM (5) 7094 FORTRAN II (6) BMD BIOMED COMPUTER
                      PROGRAMS UCLA STUDENT STORE LOS ANGELES CAL
DIXOWJ-  -BVM   DIXON WJ
                      U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
                      SCIENCES COMPUTING FACILITY
                BMD07V, MULTIPLE RANGE TESTS--A PROGRAM TO COMPUTE AN
                      ANALYSIS OF VARIANCE TABLE, FOR ONE VARIABLE OF
                      CLASSIFICATION, WITH UNEQUAL GROUP SIZES.=
                (3B) UP TO 100 GROUPS, UP TO 20,000 CASES (5) 7094 FORTRAN
                      II (6) BMD BIOMED COMPUTER PROGRAMS UCLA STUDENT STORE
                      LOS ANGELES CAL
DIXOWJ-01-BDC   DIXON WJ
                      U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
                      SCIENCES COMPUTING FACILITY
                BMD03D (CORRELATION WITH ITEM DELETION) A PROGRAM TO
                      COMPUTE A SIMPLE CORRELATION MATRIX, OMITTING UNDESIRED
                      VARIABLES.=
                (3B) UP TO 90 VARIABLES UP TO 99,999 CASES INPUT            01
                      TRANSFORMATION PRIOR TO COMPUTING (5) 7094 FORTRAN II
                      (6) BMD BIOMEDICAL COMP PROGRAMS UCLA STORE LOS ANGELES
                      CAL
DIXOWJ-01-BDD   DIXON WJ
                      U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
                      SCIENCES COMPUTING FACILITY
                BMD11D, DATA PATTERNS FOR POLYCHOTOMIES, A PROGRAM THAT
                      PRINTS PATTERNS OF ONE-COLUMN DATA AND ITEM NUMBERS OR
                      CASE NUMBERS TO IDENTIFY CASES HAVING THESE DATA
                      PATTERNS.=
                (3B) UP TO 25 VARIABLES, UP TO 700 CASES (5) 7094          01
                      FORTRAN II (6) BMD BIOMED COMP PROGRAMS, UCLA STUDENT
                      STORE LOS ANGELES CAL
DIXOWJ-01-BMD   DIXON WJ
                      U OF CAL SCHOOL OF MEDICINE LOS ANGELES CAL--(PR LIB)
                      HEALTH SCIENCES COMPUTING FACILITY
                BMD05M, DISCRIMINANT ANALYSIS FOR SEVERAL GROUPS A PROGRAM
```

TO COMPUTE A SET OF LINEAR FUNCTIONS FOR THE PURPOSE
OF CLASSIFYING AN INDIVIDUAL INTO ONE OF SEVERAL GROUPS.=
(3A) DISCRIMINANT ANALYSIS (3B) UP TO 5 GROUPS-UP TO 25   01
VARIABLES-NO OF CASES IN ANY ONE GROUP UP TO 150-OUTPUT
INCLUDES MEAN SCORES DISPERSION MATRIX, D-SQUARE
STATISTIC CLASSIFICATION (5) 7094 FORTRAN II (6) BMD
BIOMED PROGRAMS UCLA STUDENT STORE LOS ANGELES CAL

DIXOWJ-01-BRP   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD05R, POLYNOMIAL REGRESSION.=
(3A) REGRESSION ANALYSIS (3B) UP TO 500 CASES, UP TO 10   01
DEGREE POLYNOMIAL TRANSFORMATION OF INPUT. OUTPUT
INCLUDES MEANS, CORRELATION MATRIX, ANALYSIS OF VARIANCE
OF REGRESSION, RESIDUALS, PLOTS (5) 7094 FORTRAN II   01
(6) BMD BIOMED COMPUTER PROGRAMS UCLA STUDENT STORE
LOS ANGELES CAL

DIXOWJ-01-BRS   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD02R, STEPWISE REGRESSION, A PROGRAM TO COMPUTE A
SEQUENCE OF MULTIPLE LINEAR REGRESSION EQUATIONS IN A
STEPWISE MANNER.=
(3A) REGRESSION ANALYSIS (3B) UP TO 80 ORIGINAL VARIABLES.01
UP TO 9999 CASES. OUTPUT INCLUDES MEANS, STD.
DEVIATIONS, COVARIANCE MATRIX, CORRELATION MATRIX,
ANALYSIS OF VARIANCE OF REGRESSIONS, PARTIAL
CORRELATIONS, RESIDUALS, ETC (5) 7094 FORTRAN II
(6) BMD BIOMED COMPUTER PROGRAMS UCLA STUDENT STORE
LOS ANGELES CAL

DIXOWJ-01-BSG   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD05S GUTTMAN SCALE NO 1 A PROGRAM THAT ASSIGNS PROPER
WEIGHT TO GIVEN DATA ON VARIABLES RANKS THE CASES AND
ASSIGNS A GUTTMAN SCALE SCORE FOR EACH CASE.=
(3B) UP TO 25 VARIABLES (4) STUDY OF ATTITUDES OPINIONS   01
SYMPTOMS (5) 7094 FORTRAN II (6) BMD-BIOMED COMPUTER
PROGRAMS REQUEST REPORT FROM UCLA STUDENT STORE LOS
ANGELES CAL

DIXOWJ-01-BTA   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD02T AUTOCOVARIANCE AND POWER SPECTRAL ANALYSIS.=
(3B) NO OF SERIES UP TO 20. NO OF DISCRETE POINTS PER   01
SERIES UP TO 1000. OUTPUT INCLUDES AUTOCOVARIANCE POWER
SPECTRUM CROSSCOVARIANCE CROSSSPECTRUM TRANSFER FUNCTION
COHERENCE FUNCTION (4) EEG ANALYSIS (5) 7094 FORTRAN II
(6) BMD BIOMED COMPUTER PROGRAMS UCLA STUDENT STORE
LOS ANGELES CAL

DIXOWJ-01-BVA   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD04V, ANALYSIS OF COVARIANCE WITH MULTIPLE COVARIATES.=

(3A) ANALYSIS OF COVARIANCE (3B) UP TO 36 VARIABLES   01
UP TO 35 COVARIATES UP TO 99,999 CASES-OUTPUT INCLUDES
MEANS, ANALYSIS OF COVARIANCE TABLE, REGRESSION COEFF
(5) 7094 FORTRAN II (6) BMD BIOMED COMPUTER PROGRAMS
UCLA STUDENT STORE LOS ANGELES CAL

DIXOWJ-01-BVG   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD06V GENERAL LINEAR HYPOTHESIS WITH CONTRASTS.=
(3A) GENERAL LINEAR HYPOTHESIS (3B) UP TO 60 VARIABLES UP 01
TO 60 COVARIATES OUTPUT INCLUDES CELL MEANS TABLE OF
RESIDUALS REGRESSION COEFF STD ERR OF ESTIMATE (5) 7094
FORTRAN II (6) BMD BIOMED COMPUTER PROGRAMS UCLA
STUDENT STORE LOS ANGELES CAL

DIXOWJ-02-BDC   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD09D, CROSS TABULATION, INCOMPLETE DATA--A PROGRAM TO
PERFORM CROSS TABULATIONS OF INPUT DATA EXCLUDING
SPECIFIED SPECIAL VALUES.=
(3B) UP TO 2000 CASES, UP TO 100 VARIABLES (5) 7094   02
FORTRAN II (6) BMD BIOMED COMP PROGRAMS, UCLA STUDENT
STORE LOS ANGELES CAL

DIXOWJ-02-BDD   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD07D, DESCRIPTION OF STRATA WITH HISTOGRAMS--A
PROGRAM TO GROUP DATA INTO SPECIFIED NUMBER OF GROUPS
BASED ON THE ORDER OF ENTRY OF THE DATA.=
(3B) UP TO 100 VARIABLES, HISTOGRAMS, CORRELATIONS,   02
UP TO 9999 OBSERVATIONS, UP TO 10 GROUPS, UP TO 30
CLASSES (5) 7094 FORTRAN II (6) BMD BIOMED COMP
PROGRAMS, UCLA STUDENT STORE LOS ANGELES CAL

DIXOWJ-02-BSG   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD06S GUTTMAN SCALE NO 2 PART 1 A PROGRAM THAT PERFORMS THE
INITIAL STEPS FOR GUTTMAN SCALE NO 2.=
(3B) UP TO 25 VARIABLES UP TO 7 RESPONSES PER VARIABLE   02
(4) STUDY OF ATTITUDES OPINIONS SYMPTOMS (5) 7094
FORTRAN II (6) BMD-BIOMED COMPUTER PROGRAMS REQUEST
REPORT FROM UCLA STUDENT STORE LOS ANGELES CAL

DIXOWJ-02-BVA   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD02V, ANALYSIS OF VARIANCE FOR FACTORIAL DESIGN.=
(3A) ANALYSIS OF VARIANCE (3B) UP TO 8 VARIABLES, UP TO   02
999 REPLICATES, TRANSFORMATION OF INPUT DATA, OUTPUT
INCLUDES ANALYSIS OF VARIANCE TABLE, CELL AND MARGINAL
MEANS (5) 7094 FORTRAN II (6) BMD BIOMED COMPUTER
PROGRAMS UCLA STUDENT STORE LOS ANGELES CAL

DIXOWJ-03-BDC   DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY

BMD08D, CROSS TABULATION WITH VARIABLE STACKING--A
PROGRAM TO COMPUTE TWO-WAY FREQUENCY TABLES OF DATA
INPUT.=
(3A) DESCRIPTIVE STATISTICS (3B) UP TO 100 VARIABLES, UP   03
TO 1500 CASES (5) 7094 FORTRAN II (6) BMD BIOMED COMP
PROGRAMS, UCLA STUDENT STORE LOS ANGELES CAL
DIXOWJ-03-BDD DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL--(PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD06D, DESCRIPTION OF STRATA--A PROGRAM TO SEPARATE CASES
INTO SPECIFIED INTERVALS OF ONE VARIABLE AND COMPUTE
SIMPLE STATISTICAL MEASURES ON THESE INTERVALS.=
(3B) UP TO 30 VARIABLES, UP TO 700 CASES, INPUT   03
TRANSFORMATION (5) 7094 FORTRAN II (6) BMD BIOMED COMP
PROGRAMS, UCLA STUDENT STORE LOS ANGELES CAL
DIXOWJ-03-BSG DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD07S GUTTMAN SCALE NO 2 PART 2 THE PROGRAM THAT
PERFORMS THE MAJOR COMPUTATIONS OF GUTTMAN SCALE NO 2
RESPONDENTS ARE RANKED BY THE CORNELL TECHNIQUE.=
(3B) UP TO 25 VARIABLES (4) STUDY OF ATTITUDES OPINIONS   03
SYMPTOMS (5) 7094, FORTRAN II (6) BMDOBIOMED COMPUTER
PROGRAMS REQUEST REPORT FROM UCLA STUDENT STORE
LOS ANGELES CAL
DIXOWJ-04-BSG DIXON WJ
U OF CAL SCHOOL OF MED LOS ANGELES CAL-- (PR LIB) HEALTH
SCIENCES COMPUTING FACILITY
BMD08S GUTTMAN SCALE NO 2 PART 3 THE PROGRAM THAT
PERFORMS THE FINAL STEPS OF GUTTMAN SCALE NO 2 SCORES
ARE ASSIGNED.=
(3B) UP TO 25 VARIABLES (4) STUDY OF ATTITUDES OPINIONS   04
SYMPTOMS (5) 7094, FORTRAN II (6) BMD BIOMED COMPUTER
PROGRAMS REQUEST REPORT FROM UCLA STUDENT STORE LOS
ANGELES CAL
EIMERA- -CF EIMER RA
SOCONY MOBIL OIL CO PAULSBORO NJ
CURVE FITTING.=
(3B) FIFTH DEGREE POLYNOMIAL (5) BURROUGHS 205 (DATATRON)
MACHINE LANGUAGE
EISEH - -FTA EISEN H
U OF WASHINGTON SCHOOL OF MED ST LOUIS MO
FLUOROMETRIC TITRATION OF ANTIBODIES.=
(3A) CURVE FITTING (3B) MAX NO OF POINTS 20, MAX NO OF Q'S
20 (5) IBM 7072, FLAG SYSTEM
FINKM - -PSD FINK M
WASHINGTON U SEVER INSTITUTE OF TECH ST LOUIS MO
--(PR LIB) WASHINGTON U COMPUTING FACILITIES
A POWER SPECTRAL DENSITY.=
(3A) AUTOCOVARIANCE AND POWER SPECTRAL DENSITY (3B) TYPE-
WRITER OUTPUT (4) EEG ANALYSIS (5) IBM 1620/1311 40K
MONITOR 1 FORTRAN WITH SPS SUBROUTINES
FLAKR - -NT FLAKE R
U OF WASHINGTON ST LOUIS MO SEVER INST OF TECH--

110

```
                    (PR LIB) U OF WASHINGTON COMPUTING FACILITIES
              NUMERICAL TAXONOMY.=
              (3A) STATISTICAL CLASSIFICATION (3B) MAX 125 CASES-MAX 235
                 ATTRIBUTES PER CASE-UP TO 235 OF THE ATTRIBUTES MAY BE
                 IGNORED PER RUN (5) IBM 7072, 10K, 5 TAPES
FRAN  -  -TCA  FRANCIS
                    U OF MICH ANN ARBOR MICH SCHOOL OF PUBLIC HEALTH
              TCHS 2 CLUSTER ANALYSIS.=
              (3A) CLUSTER ANALYSIS (3B) MAX NO OF CASES 144--ATTRIBUTES
                 OF EACH CASE, NO LARGER THAN 144 (4) DIAGNOSIS
                 BEHAVIORAL SCIENCES (5) IBM 7090 MAD PROGRAMS
                 (6) BASED ON IBM 704 TAXONOMY PROGRAM OF TANIMOTO
FRAN  -  -TCC  FRANCIS
                    U OF MICHIGAN SCHOOL OF PUBLIC HEALTH ANN ARBOR MICH
              TCHS 4 CORRELATION COEFFICIENTS.=
              (3A) CORRELATION (3B) MAXIMUM NO OF VARIABLES 10 SAMPLE
                 SIZE 1000 MISSING VALUES PERMISSIBLE (5) IBM 7090
                 MAD PROGRAMS
FRAN  -  -TOF  FRANCIS
                    U OF MICHIGAN DEPT OF EPIDEMIOLOGY SCHOOL OF PUBLIC
                       HEALTH ANN ARBOR MICH
              TCHS1-ONE-FACTOR ANALYSIS OF VARIANCE.=
              (3A) ANALYSIS OF VARIANCE (3B) MAXIMUM NUMBER OF
                 OBSERVATIONS WITHIN EACH GROUP IS 1000, NO MISSING
                 DATA, INPUT READ IN AS FLOATING VALUES (5) IBM 7090
                 MAD PROGRAMS
FRAN  -  -TPC  FRANCIS
                    U OF MICHIGAN SCHOOL OF PUBLIC HEALTH ANN ARBOR MICH
              TCHS 5--A PROGRAM TO COMPUTE ALL 2X2 CHI-SQUARE VALUES
                 OF A MATRIX OF DICHOTOMOUS VARIABLES.=
              (3A) CHI-SQUARE ANALYSIS (3B) MAX NO OF VARIABLES 38--NO
                 LIMITATION ON SAMPLE SIZE FOR EACH GROUP (5) IBM 7090--
                 MAD PROGRAMS
FRAN  -  -TPK  FRANCIS
                    U OF MICHIGAN SCHOOL OF PUBLIC HEALTH ANN ARBOR MICH
              TCHS 3--PROBABILITIES OF K INDEPENDENT TRIALS X N EVENTS
                 (VARTING PROBABILITIES).=
              (3A) PROBABILITY (5) IBM 7090, MAD PROGRAMS
FRAN  -  -TPP  FRANCIS
                    U OF MICH ANN ARBOR MICH SCHOOL OF PUBLIC HEALTH
              TCHS 6 A PROGRAM TO PLOT KINDRED CHARTS FOR THE
                 EXPLORATION OF FAMILIAR AGGREGATIONS OF DISEASE.=
              (5) IBM 7090 MAD PROGRAMS
FRAN  -01-TPC  FRANCIS
                    U OF MICHIGAN SCHOOL OF PUBLIC HEALTH ANN ARBOR MICH
              TCHS 7--A PROGRAM TO COMPUTE SPECIFIED PARTIAL CORRELATION
                 COEFFICIENTS.=
              (3A) CORRELATION (3B) MAXIMUM SIZE OF SAMPLE LIMITED TO   01
                 1000 INPUT VARIABLES-FLOATING MISSING DATA WILL BE
                 ALLOWED FOR (5) IBM 7090 MAD PROGRAMS
FRANDR-  -MSR  FRANZ DR
                    U OF WASHINGTON SEVER INST OF TECH ST LOUIS MO--(PR LIB)
                       WASHINGTON U COMPUTING FACILITIES
              MECHANIZED SERIAL RECORD FOR MEDICAL LIBRARIES.=
```

```
                      (3B) MAX SERIAL RECORD 1250 CHARACTERS (5) IBM 7072, 10K,
                         6 TAPES AND IBM 1401, 4K, 2 TAPES ADV PROGRAMMING
                         FEATURE AUTOCODER
GALLAB-  -CSP   GALLER AB
                      U OF MICH
                   A CHI-SQUARE PROGRAM.=
                   (3A) TEST OF HYPOTHESES (3B) SAMPLE SIZE UP TO 999,999
                      (5) IBM 650 (6) SFO AUXILIARY PUBLICATIONS PROJ, LC
                      WASH DC DOC 6110
GILLPA-  -PFE   GILLIS PA
                   A PROGRAM TO FIT AN EXPONENTAL CURVE.=
                   (3A) REGRESSION (3B) UP TO 500 POINTS (5) IBM 704
                      (6) AMERICAN DOCUMENTATION INST LC WASH DC DOC 5926
GULLH -  -BPP   GULLIKSEN H
                   A BASIC PROGRAM FOR PAIRED COMPARISONS FROM BALANCED
                      INCOMPLETE BLOCKS.=
                   (3B) UP TO 999 SUBJECTS (5) IBM 650 (6) EDUCATIONAL
                      TESTING SERVICE NASSAU ST PRINCETON NJ
HAGEPW-  -PSP   HAGENSICK PW
                      U OF OHIO
                   A PROGRAM TO SOLVE PROBLEMS IN SYMBOLIC LOGIC.=
                   (3A) EXPRESSIONS FORMULATED IN PROPOSITIONAL LOGIC
                      (3B) EXPRESSION MAY CONTAIN UP TO 2000 CHARACTERS
                      (4) ARTIFICIAL INTELLIGENCE (5) LGP-30 MAGNETIC DRUM 4K
                      (6) BEHAVIORAL SCIENCE VOL 5 JAN 1960 P 87-94
HAMBRL-  -XER   HAMBLIN RL
                      U OF WASHINGTON SEVER INST OF TECH ST LOUIS MO--(PR LIB)
                      U OF WASHINGTON COMPUTING FACILITIES
                   XRAP25 EXPERIMENTAL REGRESSION ANALYSIS (STEPWISE
                      CONDENSATION.=
                   (3A) REGRESSION ANALYSIS (3B) MAX NO OF INPUT VARIABLES
                      LESS THAN 101-MAX NO OF TRANSFORMATION CONSTANTS LESS
                      THAN 41, MAX NO OF TRANSFORMATION SPECIFICATIONS
                      LESS THAN 41, MAX NO OF VARIABLES FOR REGRESSION LESS
                      THAN 33 (5) IBM 1620, 40K, CARD I/O FORTRAN
HARTD -  -PIF   HARTFORD D
                   PRETAB II-A FREQUENCY TABULATOR PROGRAM.=
                   (3B) UP TO 96 CLASS INTERVALS PER VARIABLE (5) IBM 650, 60
                      WORDS (6) DEPT RESEARCH AND TESTING FLA STATE U
                      426 EDUCATION BUILDING TALLAHASSEE FLA
HARTDL-  -PAV   HARTFORD DL
                   A PROGRAM FOR THE ANALYSIS OF VARIANCE WITH REPEATED
                      MEASURES.=
                   (3A) FACTORIAL ANALYSIS OF VARIANCE (5) IBM 709, 32K
                      (6) FLORIDA STATE U SCHOOL OF ED DEPT RESEARCH AND
                      TESTING TALLAHASSEE FLA
HESSHF-  -PER   HESS HF
                      U OF OREGON MEDICAL SCHOOL
                   A PROGRAM FOR EVALUATION OF THE REPERTORY TEST.=
                   (3B) REPERTORY TEST GRID UP TO 19 BY 19 (5) BENDIX G-150
                      (6) DIRECTOR NUMERICAL ANALYSIS CENTER U OF COLORADO
                      BOULDER COL
HOBBC -  -ISP   HOBBY C
                      CAL INST OF TECH PASADENA CAL--(PR LIB) AMERICAN
```

```
            DOCUMENTATION INST LC WASHINGTON DC DOC 5930
        AN INTEGRATED SET OF PROGRAMS FOR CURVE AND SURFACE
          FITTING ON UNEQUALLY SPACED POINTS.=
        (3A) CURVE AND SURFACE FITTING (6) BEHAVIORAL SCIENCE
          VOL 4 P 255 JULY 1959
HOFFEP-  -PCA  HOFFMAN EP
          --(PR LIB) ADI AUXILIARY PUBLICATIONS PROJECT
          LC WASHINGTON DC, DOC 6806
        A PROGRAM TO CALCULATE AVERAGE RIDITS.=
        (3A) RIDIT ANALYSIS (5) IBM 650, FLOATING DECIMAL
          DEVICE, INDEX REGISTERS (6) IBM 407 ONLINE
HOFFPJ-  -PCA  HOFFMAN PJ
          OREGON RESEARCH INST EUGENE ORE--(PR LIB) OREGON
          RESEARCH INST
        A PROGRAM FOR CORRELATION ANALYSIS AND GENERAL MULTIPLE
          REGRESSION.=
        (3A) REGRESSION (3B) UP TO 100 VARIABLES-UP TO 100
          OBSERVATIONS PER VARIABLE (5) IBM 709
HOFLJJ-  -APD  HOFLER JJ
          IBM FSD KINGSTON NY
        ANALYSIS OF A PHONOCARDIOGRAM BY A DIGITAL COMPUTER.=
        (3A) PATTERN RECOGNITION (3B) A/D CONVERSION AT 8000
          SAMPLES/SEC (4) CARDIOGRAPHY (5) IBM 704 (6) GERBARG DS
          'ANALYSIS OF PHONOCARDIOGRAM BY A DIGITAL COMPUTER'
          CIRCULATION RESEARCH VOL 11 SEPT 1962
HOLLC -   -PFS  HOLLOWAY C
          --(PR LIB) AMERICAN INST OF CHEM ENGRS, 25 W 45 ST NYC
        A PROGRAM FOR FISHER'S F DISTRIBUTION.=
        (3A) TEST OF HYPOTHESES (5) IBM 704, NO TAPES OR DRUM,
          FORTRAN
HOPKCG-  -VMS  HOPKINS CG
          UCLA SCHOOL OF PUBLIC HEALTH
        VARIANCE OF MEAN OF A SAMPLE SUBJECT TO NATURAL
          CLUSTERING INTRACLASS CORRELATION.=
        (3A) ANALYSIS OF VARIANCE (3B) UP TO 20 ELEMENTS IN EACH
          OF 20 CLUSTER SIZES (5) IBM 709-7090 FORTRAN
IKERHP-  -IAU  IKER HP
          U OF ROCHESTER SCHOOL OF MEDICINE AND DENTISTRY
        ITEM ANALYSIS USING A DICHOTOMOUS CRITERION VARIABLE.=
        (3B) UP TO 10,500 SUBJECTS WILL ACCOMODATE MISSING
          MEASURES (5) IBM 650, INDEXING REGISTERS (6) BEHAVIORAL
          SCIENCE VOL 7 P 127 JAN 1962
IKERHP-01-IAU  IKER HP
          U OF ROCHESTER SCHOOL OF MEDICINE AND SURGERY
        ITEM ANALYSIS USING A CONTINUOUS CRITERION VARIABLE.=
        (4) ITEM ANALYSIS (5) IBM 650, INDEXING REGISTERS        01
          (6) BEHAVIORAL SCIENCE VOL 7 P 127-128 JAN 1962
IKERPH-  -TCP  IKER PH
          U OF ROCHESTER SCHOOL OF MEDICINE AND SURGERY
        TWO CORRELATION PROGRAMS.=
        (3B) UP TO 10,000 CASES (4) ITEM ANALYSIS (5) IBM 650,
          INDEXING REGISTERS (6) BEHAVIORAL SCIENCE VOL 7 P 127
          JAN 1962
JENNE -   -PIM  JENNINGS E
```

```
                        U OF TEX--(PR LIB) DEPT OF EDUCATIONAL PSYCHOLOGY
                    A PROGRAM FOR INTERCORRELATION AND MULTIPLE REGRESSION.=
                    (3A) REGRESSION (5) CDC 1604 FORTRAN
KINGFJ-  -PFE   KING FJ
                    FLA STATE U DEPT RESEARCH AND TESTING SCHOOL OF
                    EDUCATION TALLAHASSEE FLA
                    A PROGRAM FOR FACTOR ESTIMATION.=
                    (3A) FACTOR ANALYSIS (3B) UP TO 40 VARIABLES OR 10 FACTORS
                     (4) PSYCHOLOGY (5) IBM 650, INDEX REGISTERS, FLOATING
                     POINT, FORTRAN
KINGFJ-  -PTA   KING FJ
                    FLA STATE U DEPT RESEARCH AND TESTING SCHOOL OF
                    EDUCATION TALLAHASSEE FLA
                    A PROGRAM FOR TRANSFORMATION ANALYSIS.=
                    (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) IBM 650, INDEX
                     REGISTERS, FLOATING POINT, FORTRAN
KIRK   - -SSA   KIRKPATRICK
                    WASHINGTON U SEVER INSTITUTE OF TECH ST LOUIS MO
                     --(PR LIB) WASHINGTON U COMPUTING FACILITIES
                    STATIS (STATISTICAL ANALYSIS OF PERIOD ANALYSIS).=
                    (3B) INPUT FOR STATIS IS FROM PERIOD ANALYSIS PROGRAM
                     TYPEWRITER OUTPUT (4) EEG ANALYSIS (5) IBM 1620/1311 40K
                     MONITOR I FORTRAN WITH SPS SUBROUTINE
KRONLH-  -GC    KRONE LH
                    MONSANTO CHEMICAL CO APPLIED MATHEMATICS SECTION
                    ST LOUIS MO
                    GROWTH CURVES.=
                    (3A) REGRESSION (5) IBM 704, 8K, 1 TAPE FORTRAN II
                     (6) AMERICAN INST OF CHEMICAL ENGRS 25 W 45 ST NYC
LADDCE-  -CPC   LADD CE
                    AD I AUXILIARY PUBLICATIONS PROJECT PHOTODUPLICATION
                    SERVICE, LC WASH DC DOC 6278
                    A COMPUTER PROGRAM FOR CONVERTING MMPI RAW SCORES
                    TO T-SCORES.=
                    (3B) UP TO 10,000 SUBJECTS OF EACH SET (4) PSYCHOLOGY
                     (5) IBM 650 (6) BEHAVIORAL SCIENCE VOL 5 P 268 JULY 1960
LANGS  - -BVA   LANGE S
                    U OF WASHINGTON SCHOOL OF MEDICINE ST LOUIS MO
                    BLOOD VOLUME ANALYSIS (SIMULTANEOUS ISOTOPE METHOD).=
                    (3B) MAX NO PER GROUP 50 NO OF GROUPS UNLIMITED (A STUDY
                     USUALLY CONSISTS IF TWO GROUPS) (4) BLOOD FLOW
                     KINETICS (5) IBM 7072, 10K FLAG REQUIREMENTS FORTRAN
LEVOE  - -SRP   LEVONIAN E
                    UCLA--(PR LIB) ADI AUXILIARY PUBLICATIONS PROJECT
                    LC WASHINGTON DC DOC 6111
                    A SWAC REGRESSION PROGRAM WHICH CHECKS THE LINEARITY OF
                     REGRESSION BY EPSILON.=
                    (3A) REGRESSION (3B) UP TO 64 VARIABLES (5) SWAC
LINGJC-  -MSA   LINGOES JC
                    U OF MICH COMPUTING CTR ANN ARBOR MICH
                    A MULTIPLE SCALOGRAM ANALYSIS.=
                    (3A) SCALOGRAM ANALYSIS (4) PSYCHOLOGY, BEHAVIORAL
                     SCIENCES (5) IBM 704/709/7090, TAPE, 8K OR 32K UMAP
LINGJC-  -PCR   LINGOES JC
```

114

```
                        U OF MICHIGAN COMPUTING CTR ANN ARBOR MICH
                   A PROGRAM FOR CORRELATION RATIOS.=
                   (3A) CORRELATION (3B) UP TO 155 VARIABLES (5) IBM 7090
                      FORTRAN II
LINGJC-   -PMP    LINGOES JC
                        U OF MICHIGAN COMPUTING CTR ANN ARBOR MICH
                   A PROGRAM FOR MAXIMIZING PREDICTION AND CLASSIFICATION.=
                   (3A) REGRESSION AND DISCRIMINANT ANALYSIS
                      (4) CLASSIFICATION OF SCORES (5) IBM 7090
LINGJC-   -PSA    LINGOES JC
                        U OF MICHIGAN COMPUTING CTR ANN ARBOR MICH
                   A PROGRAM FOR SOCIOMETRIC ANALYSIS.=
                   (3A) FACTOR ANALYSIS (3B) UP TO 155 VARIABLES
                      (4) PSYCHOLOGY (5) IBM 7090 FORTRAN II
LINGJC-   -PSR    LINGOES JC
                        U OF MICHIGAN COMPUTING CTR ANN ARBOR MICH
                   A PROGRAM FOR SQUARE ROOT FACTOR ANALYSIS.=
                   (3A) FACTOR ANALYSIS (3B) 155 VARIABLES
                      (4) PSYCHOLOGY (5) IBM 7090 FORTRAN II
LINGJC-   -SDA    LINGOES JC
                        U OF MICHIGAN COMPUTING CTR ANN ARBOR MICH
                   SEQUENTIAL DEPENDENCY ANALYSIS--A PROGRAM FOR FACTORING
                      NONLINEAR OR NONMETRIC DATA.=
                   (4) BEHAVIORAL SCIENCE (5) IBM 7090
LINGJC-   -TOP    LINGOES JC
                        U OF MICHIGAN COMPUTING CTR ANN ARBOR MICH
                   A TAXONOMIC OPTIMIZATION PROCEDURE AND CLASSIFICATION
                      PROGRAM.=
                   (3A) MAXIMIZATION OF THE COVARIANCE AMONG THE VARIABLES
                      (4) CLASSIFICATION OF GROUPS (5) IBM 7090
                      (6) BEHAVIORAL SCIENCE VOL 8 NO 4 OCT 1963
LINGJC-,  -MSA    LINGOES JC
                        MICH STATE U EAST LANSING MICH-- (PR LIB) LIBRARY
                        COMPUTER LAB PROGRAM K9M
                   MULTIPLE SCALOGRAM ANALYSIS.=
                   (3A) SCALOGRAM ANALYSIS (4) PSYCHOLOGY, TESTING (5) ILLIAC,
                      SILLIAC, CYCLONE
MARTCH-   -SMR    MARTING CH
                        U OF WASHINGTON COMPUTER CTR ST LOUIS MO--(PR LIB) U OF
                        WASHINGTON COMPUTER CTR
                   A STEPWISE MULTIPLE REGRESSION PROGRAM.=
                   (3A) REGRESSION ANALYSIS (3B) OBSERVATIONS LESS THAN
                      100,000, INDEPENDENT VARIABLES LESS THAN 60, ONLY ONE
                      DEPENDENT VARIABLE PER PROBLEM (5) FORTRAN, IBM 7072, 4
                      TAPE DRIVES ON ONE CHANNEL NO SENSE SWITCHES OR
                      LIGHTS A MODIFICATION OF EFROYMSOM'S AND BMD AT UCLA
MASSFJ-   -XCC    MASSEY FJ
                        UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                        TABULATION SERIES PROGRAMS
                   XTAB 81, A CORRELATION COEFFICIENT PROGRAM (SIMPLE AND
                      MULTIPLE).=
                   (3A) CORRELATION (3B) UP TO 10 DEPENDENT VARIABLES, UP TO
                      50 SETS OF 4 OR LESS DEPENDENT VARIABLES (5) 7090,
                      FORTRAN
```

```
MASSFJ-  -XHL   MASSEY FJ
                UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                TABULATION SERIES PROGRAMS
                XTAB10 (HI.-LOW PROGRAM) A SCREENING PROGRAM TO LIST
                THE NUMBER AND PERCENTS OF CASES OF A VARIABLE
                FALLING INTO 3 CLASSES.=
                (3A) DESCRIPTIVE STATISTICS (3B) ZERO CASES ARE ASSUMED
                 MISSING, MEANS, STANDARD DEVIATIONS, HI, LOW AND RANGE
                 (5) 7090, FORTRAN II
MASSFJ-  -XLP   MASSEY FJ
                UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                TABULATION SERIES PROGRAMS
                XTAB51, A LISTING PROGRAM WHICH PREPARES LISTS OF CASES
                 MEETING SPECIFIED RESTRICTIONS.=
                (3B) UP TO 20 LISTS (5) 7090, FORTRAN II
MASSFJ-  -XOW   MASSEY FJ
                UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                TABULATION SERIES PROGRAMS
                XTAB11--ONE WAY TABLES WITH HISTOGRAMS PLOT.=
                (3B) UP TO 250 ONE-WAY DISTRIBUTION TABLES, EACH WITH UP
                 TO 11 CLASSES, DATA CAN BE TRANSFORMED, UP TO 1400
                 VARIABLES PER CASE (5) 7090, FORTRAN II
MASSFJ-  -XPO   MASSEY FJ
                UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                TABULATION SERIES PROGRAMS
                XTAB12--PAIRED ONE-WAY TABLES WITH HISTOGRAMS.=
                (3B) UP TO 125 PAIRS OF ONE-WAY DISTRIBUTION TABLES,
                 UP TO 11 CLASSES PER VARIABLE (5) 7090, FORTRAN II
MASSFJ-  -XPP   MASSEY FJ
                UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                TABULATION SERIES PROGRAMS
                XTAB41, PLOTTING PROGRAM 1.=
                (3B) UP TO 18 VARIABLES SCATTERGRAMS IN ONE PASS, ALSO
                 REGRESSION EQUATION AND CORRELATION COEFF (5) 7090,
                 FORTRAN II
MASSFJ-  -XST   MASSEY FJ
                UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                TABULATION SERIES PROGRAMS
                XTAB31, SUMMARY TABLES 1.=
                (3A) UP TO 150 TABLES (MEANS, STANDARD DEV, HI AND LOW
                 VALUES, STANDARD ERRORS OF THE MEANS), UP TO 1400
                 VARIABLES PER CASE UP TO 10 VARIABLES PER TABLE (5) 7090
                 FORTRAN II
MASSFJ-  -XTW   MASSEY FJ
                UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                TABULATION SERIES PROGRAMS
                XTAB21--TWO-WAY TABLES 1.=
                (3B) UP TO 50 TWO-WAY DISTRIBUTION TABLES 11X11 MATRIX
                 (5) 7090, FORTRAN II
MASSFJ-01-XCC   MASSEY FJ
                UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                TABULATION SERIES PROGRAMS
                XTAB61, A CROSS CLASSIFICATION TABLES PROGRAM.=
                (3B) CONTROL CARD SPECIFICATION (5) 7090, FORTRAN II      01
```

```
MASSFJ-01-XPP    MASSEY FJ
                     UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                     TABULATION SERIES PROGRAMS
                 XTAB42, PLOTTING PROGRAM II.=
                 (3B) CONTROL CARD SPECIFICATION (5) 7090 FORTRAN II         01
MASSFJ-01-XST    MASSEY FJ
                     UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                     TABULATION SERIES PROGRAMS
                 XTAB32, SUMMARY TABLES PROGRAM 2 TO GIVE COUNTS OF
                   INDIVIDUALS WHO MEET SPECIFIED ROW AND COLUMN
                   RESTRICTIONS.=
                 (5) 7090, FORTRAN LI                                        01
MASSFJ-01-XTW    MASSEY FJ
                     UCLA SCHOOL OF PUBLIC HEALTH--(PR LIB) CROSS
                     TABULATION SERIES PROGRAMS
                 XTAB22--TWO-WAY TABLES LI--A PROGRAM TO COMPUTE
                   FREQUENCIES, STANDARD DEVIATIONS AND CHI-SQUARE.=
                 (3B) UP TO 150 TWO-WAY DISTRIBUTION TABLES, UP TO           01
                   5X5 MATRIX (5) 7090, FORTRAN II
MCKIJ -   -PIA   MCKINNEY J
                     U OF FLA STATISTICAL LAB
                 A PROGRAM FOR INFORMATION ANALYSIS OF SEQUENTIAL
                   DEPENDENCIES.=
                 (3A) MULTIVARIATE INFO ANALYSIS (3B) INPUT RESTRICTED TO
                   SEQUENCES OF LENGTH 64 (4) BEHAVIORAL SCIENCE (5) IBM
                   650 (6) BEHAVIORAL SCIENCE VOL 2 P 128 JAN 1962
MCKIRE-   -AV    MCKINNEY RE
                     U OF WASHINGTON ST LOUIS MO--(PR LIB) U OF WASHINGTON
                     COMPUTER CENTER
                 ANALYSIS OF VARIANCE.=
                 (3A) ANALYSIS OF VARIANCE (3B) NUMBER OF VARIABLES LESS
                   THAN OR EQUAL TO EIGHT NUMBER OF REPLICATES LESS THAN
                   OR EQUAL TO 999, NUMBER OF DATA POINTS PER REPLICATE
                   LESS THAN OR EQUAL TO 200, NO MISSING DATA ALLOWED
                   (5) IBM 7072, 10K 4 TAPES DRIVES ON ONE CHANNEL
MCKIRE-   -GLH   MCKINNEY RE
                     U OF WASHINGTON SEVER INST OF TECH ST LOUIS MO
                 A GENERAL LINEAR HYPOTHESIS.=
                 (3A) CLASSIFICATION--ANALYSIS OF VARIANCE (3B) (P) NO OF
                   ANALYSIS OF VARIANCE VARIABLES P LESS THAN OR EQUAL TO
                   25 (G) NO OF COVARIATES LESS THAN OR EQUAL TO 25 P PLUS
                   G LESS THAN OR EQUAL TO 25 (5) IBM 7072 10K FLAG
                   REQUIREMENTS STOPS FORTRAN
MCMACA-   -BST   MCMAHAN CA
                     LOUISIANA STATE U SCHOOL OF MED NEW ORLEANS LA
                 BARTLETT'S TEST FOR HOMOGENEITY OF VARIANCES.=
                 (3A) TEST OF HYPOTHESES (5) IBM 1620, 1622, 20K, FORTRAN
                   (6) DIXON WJ, MASSEY FJ 'INTRODUCTION TO STATISTICAL
                   ANALYSIS' MCGRAW HILL NYC 1957 P 279-181
MCMACA-   -CP    MCMAHAN CA
                     LOUISIANA STATE U SCHOOL OF MED NEW ORLEANS LA
                 A CORRELATION PROGRAM.=
                 (3A) CORRELATION (5) IBM 1620, 1622, 20K FORTRAN (6) WJ
                   DIXON, FJ MASSEY, 'INTRODUCTION TO STATISTICAL ANALYSIS,'
```

```
                         MCGRAW-HILL NYC 1957, P 198-204
MCMACA-   -CSM    MCMAHAN CA
                         LOUISIANA STATE U SCHOOL OF MED NEW ORLEANS LA
                  COMPARISON OF SAMPLE MEAN AND POPULATION MEAN WHEN THE
                  VARIANCE IS UNKNOWN, T-DISTRIBUTION.=
                  (3A) TEST OF HYPOTHESES (5) IBM 1620, 1622, 20K, FORTRAN
                   (6) DIXON WJ, MASSEY FJ 'INTRODUCTION TO STATISTICAL
                  ANALYSIS' MCGRAW HILL NYC 1957 P 115-118
MCMACA-   -CSY    MCMAHAN CA
                         LOUISIANA STATE U SCHOOL OF MED NEW ORLEANS LA
                  CHI-SQUARE WITH YATES CORRECTION TWO-BY-TWO TABLES.=
                  (3A) TEST OF HYPOTHESES (5) IBM 1620, 1622, 20K, FORTRAN
                   (6) DIXON WJ, MASSEY FJ 'INTRODUCTION TO STATISTICAL
                  ANALYSIS' MCGRAW HILL NYC 1957 P 225-226
MCMACA-   -LR     MCMAHAN CA
                         LOUISIANA STATE U SCHOOL OF MED NEW ORLEANS LA
                  LINEAR REGRESSION.=
                  (3A) REGRESSION ANALYSIS (5) IBM 1620, 1622, 20K,
                   FORTRAN (6) DIXON WJ, MASSEY FJ 'INTRODUCTION TO
                  STATISTICAL ANALYSIS' MCGRAW HILL NYC 1957 P 189-196
MCMACA-   -LSP    MCMAHAN CA
                         LOUISIANA STATE U SCHOOL OF MED NEW ORLEANS LA
                  A LATIN SQUARE PROGRAM.=
                  (3A) EXPERIMENT DESIGN, ANALYSIS OF VARIANCE
                   (4) EXPERIMENTAL DESIGN (5) IBM 1620, 1622, 20K, FORTRAN
                   (6) DIXON WJ, MASSEY FJ 'INTRODUCTION TO STATISTICAL
                  ANALYSIS' MCGRAW HILL NYC 1957 P 171-174
MCMACA-   -PO     MCMAHAN CA
                         LOUISIANA STATE U SCHOOL OF MEDICINE NEW ORLEANS LA
                  PAIRING OBSERVATIONS.=
                  (4) PSYCHOLOGY (5) IBM 1620, 1622, 20K FORTRAN
                   (6) DIXON WJ, MASSEY FJ 'INTRODUCTION TO STATISTICAL
                  ANALYSIS' MCGRAW HILL NYC 1957 P 124-127
MCMACA-   -SVC    MCMAHAN CA
                         LOUISIANA STATE U SCHOOL OF MEDICINE NEW ORLEANS LA
                  SINGLE VARIABLE OF CLASSIFICATION.=
                  (5) IBM 1620, 1622, 20K FORTRAN (6) DIXON WJ, MASSEY FJ
                   'INTRODUCTION TO STATISTICAL ANALYSIS' MCGRAW HILL NYC
                  1957 P 145-152
MCMACA-   -THC    MCMAHAN CA
                         LOUISIANA STATE U SCHOOL OF MED NEW ORLEANS LA
                  TESTS OF HYPOTHESES CONCERNING MEANS OF TWO POPULATIONS.=
                  (3A) TEST OF HYPOTHESES (5) IBM 1620, 1622, 20K FORTRAN
                   (6) DIXON WJ, MASSEY FJ ' INTRODUCTION TO STATISTICAL
                  ANALYSIS' MCGRAW HILL NYC 1957 P 119-122
MCMACA-   -TLR    MCMAHAN CA
                         LOUISIANA STATE U SCHOOL OF MED NEW ORLEANS LA
                  TESTS FOR LINEARITY OF REGRESSION.=
                  (5) IBM 1620, 1622, 20K, FORTRAN (6) DIXON WJ, MASSEY FJ
                   'INTRODUCTION TO STATISTICAL ANALYSIS' MCGRAW HILL NYC
                  1957 P 196-198
MCMACA-   -TVC    MCMAHAN CA
                         LOUISIANA STATE U SCHOOL OF MEDICINE NEW ORLEANS LA
                  TWO VARIABLES OF CLASSIFICATION, SINGLE OBSERVATION.=
```

```
                        (5) IBM 1620, 1622, 20K FORTRAN (6) DIXON WJ, MASSEY FJ
                         'INTRODUCTION TO STATISTICAL ANALYSIS' MCGRAW HILL NYC
                         1957 P 155-163
MCMACA-01-TVC   MCMAHAN CA
                        LOUISIANA STATE U SCHOOL OF MEDICINE NEW ORLEANS LA
                TWO VARIABLES OF CLASSIFICATION, REPEATED MEASUREMENTS.=
                        (5) IBM 1620, 1622, 20K FORTRAN (6) DIXON WJ, MASSEY FJ    01
                         'INTRODUCTION TO STATISTICAL ANALYSIS' MCGRAW HILL NYC
                         1957 P 163-168
MED CO-  -PSA   MED COLLEGE OF VIRGINIA
                        RICHMOND VA
                A POWER SPECTRUM ANALYSIS PRGM.=
                (3A) UP TO 500 OBSERVATIONS OUTPUT INCLUDES AUTO CORR
                    COEFF AND SPECTRAL DENSITY IN A TIME SERIES (4) EEG
                    ANALYSIS
MEDICO-  -AV    MEDICAL COLLEGE OF VA RICHMOND VA
                ANALYSIS OF VARIANCE.=
                (3A) ANALYSIS OF VARIANCE
MEDICO-  -DEC   MEDICAL COLLEGE OF VA RICHMOND VA
                A DOUBLE EXPONENTIAL CURVE FIT BY MAXIMUM LIKELIHOOD.=
                (3A) REGRESSION (MAX LIKELIHOOD)
MEDICO-  -ECF   MEDICAL COLLEGE OF VA RICHMOND VA
                AN EXPONENTIAL CURVE FIT BY MAXIMUM LIKELIHOOD.=
                (3A) REGRESSION (MAX LIKELIHOOD)
MEDICO-  -GMR   MEDICAL COLLEGE OF VA RICHMOND VA
                A GROUP MULTIPLE REGRESSION ANALYSIS.=
                (3A) REGRESSION (3B) CORRECTS FOR MEAN FOR EACH GROUP
                    OF DATA
MEDICO-  -MRA   MEDICAL COLLEGE OF VA RICHMOND VA
                A MULTIPLE REGRESSION ANALYSIS PROGRAM.=
                (3A) REGRESSION ANALYSIS
MEDICO-  -NOF   MEDICAL COLLEGE OF VIRGINIA
                        RICHMOND VA
                AN N ORDINATE FOURIER ANALYSIS PRGM.=
                (3B) N EQUAL TO 200
MEDICO-  -PAC   MEDICAL COLLEGE OF VA RICHMOND VA
                PROBIT ANALYSIS WITH CONFIDENCE LIMITS.=
                (3A) BIOASSAY--PROBIT ANALYSIS
MEDICO-  -SLF   MEDICAL COLLEGE OF VA RICHMOND VA
                A STRAIGHT LINE FIT PROGRAM WITH MULTIPLE CONFIDENCE
                    INTERVALS.=
                (3A) REGRESSION ANALYSIS (3B) MAX NO OF CONFIDENCE
                    INTERVALS EQUAL TO 5
MEIEP -  -EUB   MEIER P
                        U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
                E2 UCC BIN NONLINEAR ESTIMATION (VARIABLE METRIC METHOD).=
                (5) BINARY PROGRAM
MEIEP -  -EUF   MEIER P
                        U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
                E2 UOC F02 NONLINEAR ESTIMATION (BSCC VERS 1).=
                (5) FORTRAN PROGRAM
MEIEP -  -FHF   MEIER P
                        U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                F2 HED F02 EIGENVALUES AND VECTORS OF A REAL SYMMETERIC
```

119

```
                          MATRIX.=
                          (3A) MATRIX ALGEBRA (5) FORTRAN PROGRAM
MEIEP -  -FUF    MEIER P
                          U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                  F2 UCM FO2 CANONICAL ANALYSIS.=
                          (3A) CANONICAL ANALYSIS (4) BEHAVIORAL SCIENCES
                             CORRELATION BETWEEN CRITERIA AND PREDICTOR MEASURES
                             (5) FORTRAN PROGRAM
MEIEP -  -FUM    MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                             CHICAGO ILL
                  F2-UCM-MIX FACTOR ANALYSIS.=
                          (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) FORTRAN PROGRAM
MEIEP -  -GHF    MEIER P
                          U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                  GO HED FO2 CANONICAL CORRELATIONS.=
                          (3A) CANONICAL ANALYSIS (4) BEHAVIORAL SCIENCES CORRELA-
                             TION BETWEEN CRITERIA AND PREDICTOR MEASURES
                             (5) FORTRAN PROGRAM
MEIEP -  -GUB    MEIER P
                          U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                  GO-UOC-BIN SURVIVAL TABLES (ACTUARIAL METHOD).=
                          (5) BINARY PROGRAM
MEIEP -  -GUD    MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                             CHICAGO ILL
                  G1 UCM DATA SCREENING NO 3.=
                          (5) FORTRAN PROGRAM
MEIEP -  -GUF    MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                             CHICAGO ILL
                  G1-UCM-FO2--GENERAL CHI-SQUARE.=
                          (5) FORTRAN PROGRAM
MEIEP -  -GUM    MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                             CHICAGO ILL
                  G3 UCM MIX TIME SERIES ANALYSIS NO 2.=
                          (3A) TIME SERIES (4) EEG ANALYSIS (5) FORTRAN PROGRAM
MEIEP -  -GUP    MEIER P
                          U OF CHICAGO BIOMEDICAL SCIENCES COMPUTATION CTR
                             CHICAGO ILL
                  G2 UCM PROBIT ANALYSIS (DUMMY).=
                          (3A) PROBIT ANALYSIS (5) FORTRAN PROGRAM
MEIEP -  -ZBA    MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                             CHICAGO ILL
                  ZO BSC AC PEDIATRIC CORRELATION PH 1.=
                          (3A) CORRELATION ANALYSIS (5) FORTRAN PROGRAM IBM 1401
MEIEP -01-EUB    MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
                  000077-E2-UOC BIN NONLINEAR ESTIMATION (BSCC VERS 1).=
                          (5) BINARY PROGRAM                                      01
MEIEP -01-EUF    MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
```

```
                                E2 UOC FO2 NONLINEAR ESTIMATION (VARIABLE METRIC METHOD).=
                                (5) FORTRAN PROGRAM                                    01
MEIEP -01-FHF    MEIER P
                                    U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                                F2 HED FO2 EIGENVECTORS AND VALUES OF A NONSYMMETRIC
                                    MATRIX.=
                                (3A) MATRIX ALGEBRA (5) FORTRAN PROGRAM                01
MEIEP -01-GHF    MEIER P
                                    U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                                GO HED FO2 MAXIMUM CANONICAL CORRELATION.=
                                (3A) CANONICAL ANALYSIS (4) BEHAVIORAL SCIENCES         01
                                    CORRELATION BETWEEN CRITERIA AND PREDICTOR MEASURES
                                    (5) FORTRAN PROGRAM
MEIEP -01-GUF    MEIER P
                                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                                    CHICAGO ILL
                                GO-UOC-FO2, WEIGHTED MEAN AND STANDARD DEVIATION.=
                                (3A) DESCRIPTIVE STATISTICS (5) BINARY PROGRAM          01
MEIEP -01-GUM    MEIER P
                                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                                    CHICAGO ILL
                                G3 UCM MIX TIME SERIES ANALYSIS NO 1.=
                                (3A) TIME SERIES (4) EEG ANALYSIS (5) FORTRAN PROGRAM   01
MEIEP -02-FHF    MEIER P
                                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                                    CHICAGO ILL
                                F2 HED FO2 PRINCIPAL COMPONENTS ANALYSIS CORR OR
                                    DISPER MATRIX.=
                                (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) FORTRAN PROGRAM  02
MEIEP -02-GHF    MEIER P
                                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                                    CHICAGO ILL
                                G1 HED FO2 CENTROIDS, DISPERSIONS IN DISCRIMINANT OR
                                    FACTOR SPACE.=
                                (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) FORTRAN PROGRAM  02
MEIEP -02-GUF    MEIER P
                                    U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                                GO UCM FO2 GUTTMAN SCALING NO 2 (PART 2).=
                                (5) FORTRAN PROGRAM                                    02
MEIEP -02-GUM    MEIER P
                                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                                    CHICAGO ILL
                                G4 UCM MIX ANALYSIS OF VARIANCE NO1.=
                                (5) FORTRAN PROGRAM                                    02
MEIEP -03-FHF    MEIER P
                                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                                    CHICAGO ILL
                                F2 HED FO2 PRINCIPAL COMPONENTS ANALYSIS (RAW SCORES).=
                                (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) FORTRAN PROGRAM  03
MEIEP -03-GHF    MEIER P
                                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                                    CHICAGO ILL
                                G3 HED FO2 VARIMAX ROTATION OF A FACTOR MATRIX (KAISER).=
                                (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) FORTRAN PROGRAM  03
```

```
MEIEP -03-GUF   MEIER P
                    U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                GO UCM F02 GUTTMAN SCALING NO 2 (PART 3).=
                (5) FORTRAN PROGRAM                                      03
MEIEP -03-GUM   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                G4 UCM MIX ANALYSIS OF COVARIANCE.=
                (3A) ANALYSIS OF COVARIANCE (5) FORTRAN PROGRAM          03
MEIEP -04-GHF   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                G4 HED F02 TWO TO THREE WAY ANALYSIS OF VARIANCE
                  COV. ADJUST.=
                (3A) ANALYSIS OF VARIANCE (5) FORTRAN PROGRAM            04
MEIEP -04-GUF   MEIER P
                    U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                G4 UCM F02 GENERAL LINEAR HYPOTHESIS FOR ANOVA.=
                (5) FORTRAN PROGRAM                                      04
MEIEP -04-GUM   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                G4 UCM MIX ANALYSIS OF VARIANCE NO 2.=
                (3A) ANALYSIS OF VARIANCE (5) FORTRAN PROGRAM            04
MEIEP -05-GHF   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                GO HED F02 TEST H**2, WITH COVARIANCE CONTROLS.=
                (5) FORTRAN PROGRAM                                      05
MEIEP -05-GUF   MEIER P
                    U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                G4 UCM F02 GENERAL HYPOTHESIS NO 2 FOR ANOVA.=
                (3A) GENERAL LINEAR HYPOTHESIS (5) FORTRAN PROGRAM       05
MEIEP -05-GUM   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                G2 UCM MIX CORRELATION ANALYSIS (WITH PLOT).=
                (3A) CORRELATION ANALYSIS (5) FORTRAN PROGRAM            05
MEIEP -06-GHF   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                G2 HED F02 CORRELATION ANALYSIS.=
                (3A) CORRELATION ANALYSIS (5) FORTRAN PROGRAM            06
MEIEP -06-GUF   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                GO UCM R02 ROTATION OF A FACTOR MATRIX.=
                (3A) FACTOR ANALYSIS (5) FORTRAN PROGRAM                 06
MEIEP -06-GUM   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                G1 UCM MIX DISCRIMINANT ANALYSIS-SEVERAL GROUPS.=
                (3A) DISCRIMINANT ANALYSIS (5) FORTRAN PROGRAM           06
MEIEP -07-GHF   MEIER P
```

```
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                GO HED FO2 MULTIPLE DISCRIMINANT FUNCTIONS.=
                (3A) DISCRIMINANT ANALYSIS (5) FORTRAN PROGRAM            07
MEIEP -07-GUF   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                G2 UCM FO2 COMPONENT ANALYSIS.=
                (3A) COMPONENT ANALYSIS (5) FORTRAN PROGRAM              07
MEIEP -07-GUM   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
                G2-UOC-MIX, GENERALIZED STEPWISE REGRESSION (MODIFIED
                    BIMD 34).=
                (3A) REGRESSION ANALYSIS (5) BINARY PROGRAM              07
MEIEP -08-GHF   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
                G2 HED FO2 MULTIPLE REGRESSION.=
                (3A) REGRESSION ANALYSIS (3B) UP TO 50 VARIABLES         08
                    (5) FORTRAN PROGRAM
MEIEP -08-GUF   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                3 GO UCM FO2 SUBROUTINE ROTATE (VARIMAX).=
                (3A) FACTOR ANALYSIS (4) PSYCHOLOGY-BEHAVIORAL SCIENCES  08
                    (5) FORTRAN PROGRAM
MEIEP -08-GUM   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
                G2 UCM MIX POLYNOMIAL REGRESSION.=
                (5) FORTRAN PROGRAM                                      08
MEIEP -09-GUF   MEIER P
                    U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                GO UOC FO2 SURVIVAL TABLES (ACTUARIAL METHOD).=
                (5) FORTRAN PROGRAM                                      09
MEIEP -09-GUM   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
                G2 UCM MIX PERIODIC REGRESSION.=
                (3A) REGRESSION ANALYSIS (5) FORTRAN PROGRAM             09
MEIEP -10-GUM   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
                G2 UCM MIX GENERALIZED STEPWISE REGRESSION (MODIFIED 09).=
                (3A) REGRESSION ANALYSIS (5) FORTRAN PROGRAM             10
MEIEP -11-GUA   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
                G4 UCM FOR ANALYSIS OF COVARIANCE.=
                (3A) ANALYSIS OF COVARIANCE (5) FORTRAN PROGRAM          11
MEIEP -11-GUM   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
                G2 UOC MIX GENERALIZED STEPWISE REGRESSION (MODIFIED
                    BIMD 34).=
                (3A) REGRESSION ANALYSIS (5) FORTRAN PROGRAM             11
MEIEP -12-GUM   MEIER P
                    U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                    CHICAGO ILL
```

```
                          CHICAGO ILL
                          G1 UCM F02 CROSS TABULATION NO 2.=
                          (5) FORTRAN PROGRAM                                 22
          MEIEP -23-GUF   MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                          CHICAGO ILL
                          G1 UCM F02 DATA PATTERNS-DICROTOMY.=
                          (5) FORTRAN PROGRAM                                 23
          MEIEP -24-GUF   MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                          CHICAGO ILL
                          G1 UCM F02 CROSS TABULATION NO 1.=
                          (5) FORTRAN PROGRAM                                 24
          MEIEP -25-GUF   MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                          CHICAGO ILL
                          G0 UCM F02 GENERAL PLOT.=
                          (5) FORTRAN PROGRAM                                 25
          MEIEP -26-GUF   MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                          CHICAGO ILL
                          G1 UCM F02 DATA PATTERNS-POLYCHOTOMY.=
                          (5) FORTRAN PROGRAM                                 26
          MEIEP -27-GUF   MEIER P
                          U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR
                          CHICAGO ILL
                          G1 UCM F02 SIMPLE MISSING VALUE ROUTINE NO 3.=
                          (5) FORTRAN PROGRAM                                 27
          MEIEP -28-GUF   MEIER P
                          U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                          G0 UCM F02 GUTTMAN SCALING NO 2 (PART 1).=
                          (5) FORTRAN PROGRAM                                 28
          MEIEP -29-GUF   MEIER P
                          U OF CHICAGO BIOL SCIENCES COMPUTATION CTR CHICAGO ILL
                          G0 UCM F02 GUTTMAN SCALING NO 1.=
                          (5) FORTRAN PROGRAM                                 29
          MERRHH-  -CTP   MERRITT HH
                          COLUMBIA U COLLEGE OF PHYSICIANS AND SURGEONS
                          630 W 168 ST NYC
                          CROSS TAB, A PROGRAM DESIGNED TO COMPUTE FREQUENCY TABLES
                           AND BASIC STATISTICS ON DATA STORED IN ANY FORMAT
                           ON CARDS OR TAPE.=
                          (3B) MANY OPTIONS AVAILABLE (5) IBM 7090
          MILLC -  -FSP   MILLER C
                          PACIFIC STATE HOSP POMONA CAL
                          A FACTOR SCORE PROGRAM.=
                          (3A) FACTOR ANALYSIS (3B) UP TO 20 BY 20 MATRIX--UP TO
                           1000 CASES (4) PSYCHOLOGY (5) IBM 7090, 32K, FORTRAN AND
                           FAP (6) THURSTONE LL 'MULTIPLE FACTOR ANALYSIS' CHICAGO
                           ILL U OF CHICAGO PRESS 1947 P 511-516
          MILLCR-  -PFT   MILLER CR
                          PACIFIC STATE HOSPITAL POMONA CAL
                          A PROGRAM FOR A-FOLD TABLES.=
                          (3A) STATISTICAL PARAMETERS (3B) UP TO 50 VARIABLES AND
```

```
                 99,999 CASES (4) BEHAVIORAL SCIENCE (5) IBM 7090,
                 32K FORTRAN (6) MERRIFIELD P 'DIMENSIONS OF DECISION'
                 SANTA BARBARA CAL-GEN ELECTRIC 1960 P 20-22
MILLCR-    -PP   MILLER CR
                    PACIFIC STATE HOSP POMONA CAL
                 A PROCRUSTES PROGRAM.=
                 (3A) FACTOR ANALYSIS (3B) UP TO 100 VARIABLES--30 FACTOR
                    MATRIX (4) PSYCHOLOGY (5) IBM 7090, 32K, FORTRAN
                    (6) BEHAVIORAL SCIENCE VOL 8 P 86 JAN 1963
NICHHC-    -CFP  NICHOLSON HC
                    U OF MIAMI SCHOOL OF MED MIAMI FLA
                 CURVE FITTING PROGRAMS.=
                 (3A) RATIOS OF POLYNOMIALS, SUMS OF EXPONENTIALS,
                    SEGMENTED EXPONENTIALS USING NEWTON, STEEPEST DESCENT
                    (4) DRUG SCREENING, MULTICOMPARTMENT KINETICS (5) IBM 1620
NICHHC-    -IPW  NICHOLSON HC
                    U OF MIAMI SCHOOL OF MED MIAMI FLA
                 INTERCORRELATION PROGRAM WHICH COMPUTES ALL PAIRWISE
                    PEARSON-R CORR COEFF.=
                 (3A) CORRELATION (5) IBM 1620
NICHHC-    -LRC  NICHOLSON HC
                    U OF MIAMI SCHOOL OF MED MIAMI FLA
                 LINEAR REGRESSION AND CORRELATION PROGRAM.=
                 (3A) REGRESSION ANALYSIS (5) IBM 1620
NICHHC-    -MCP  NICHOLSON HC
                    U OF MIAMI SCHOOL OF MED MIAMI FLA
                 MULTIPLE CORRELATION PROGRAM, A PROGRAM WHICH COMPUTES
                    MULTIPLE CORRELATION COEFFICIENTS.=
                 (3A) CORRELATION (5) IBM 1620
NICHHC-    -PP   NICHOLSON HC
                    U OF MIAMI SCHOOL OF MED MIAMI FLA
                 PLOT PROGRAM.=
                 (5) IBM 1620
NICHHC-10-TTH    NICHOLSON HC
                    U OF MIAMI SCHOOL OF MED MIAMI FLA
                 T-TEST WITH HISTOGRAM--A PROGRAM THAT PLOTS A HISTOGRAM
                    OF PERCENTAGE DIFFERENCES.=
                 (3) TEST OF HYPOTHESES (5) IBM 1620                          10
NICHRC-    -RRI  NICHOLS RC
                    PURDUE U COMPUTING LAB
                 ROUTINE R-19--AN INTERCORRELATION PROGRAM.=
                 (3A) CORRELATION (3B) UP TO 80 VARIABLES (5) DATATRON 202,
                    CARDS OR TAPE
NICKMR-    -POR  NICKLES MR
                    U OF ROCHESTER COMPUTING CTR ROCHESTER NY
                 A PROGRAM FOR THE OBLIMAX ROTATION TO SIMPLE STRUCTURE.=
                 (3A) FACTOR ANALYSIS--OBLIMAX ROTATION (3B) UP TO 10
                    FACTORS--UP TO 100 TESTS (MUST BE EVEN) (4) PSYCHOLOGY
                    (5) IBM 650
NUGECA-    -DDC  NUGENT CA
                    U OF UTAH COL OF MED DEPT OF INTERNAL MED SALT LAKE
                       COUNTY GEN HOSP SALT LAKE CITY UTAH
                 THE DISTRIBUTION AND DISPOSAL OF CORTISOL IN HUMANS.=
                 (3A) DIFFERENTIAL EQUATIONS (NON-LINEAR) (5) ANALOG
```

```
                    COMPUTER
NUGECA-   -BGU   NUGENT CA
                    U OF UTAH COL OF MED DEPT OF INTERNAL MED SALT LAKE
                    COUNTY GEN HOSP SALT LAKE CITY UTAH
                 AN EXAMINATION OF THE GLYCINE-URATE HYPOTHESIS IN PRIMARY
                    GOUT.=
                 (5) ANALOG COMPUTER
NUGECA-   -IDM   NUGENT CA
                    U OF UTAH COL OF MED DEPT INTERNAL MED SALT LAKE
                    COUNTY GEN HOSP SALT LAKE CITY UTAH
                 ISOTOPE DILUTION METHODS FOR HORMONE PRODUCTION RATE
                    DETERMINATIONS.=
                 (5) ANALOG COMPUTER
OGBORE-   -ABA   OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 AIR BACKGROUND ANALYSIS--A PROGRAM TO COMPUTE FALLOUT
                    ACTIVITY IN AN AIR SAMPLE.=
                 (4) NEURON ACTIVATION ANALYSIS (5) IBM 1620, 20K TAPE
                    FORTRAN FORMAT PROGRAM
OGBORE-   -BSP   OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 BACKGROUND SUBTRACT--A PROGRAM WHICH SUBTRACTS EXPERIMENT
                    BACKGROUND FROM 400 CHANNEL OUTPUT.=
                 (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
                    FORMAT
OGBORE-   -CCP   OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 COMPOSITE CONVERTER AND PEAK SUMS WITH FLUX--A PROGRAM
                    WHICH MULTIPLIES 400-CHANNEL OUTPUT BY A FACTOR AND
                    SUMS SELECTED AREAS.=
                 (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
                    FORMAT
OGBORE-   -CP    OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 CORRELATION PROGRAM.=
                 (3A) CORRELATION ANALYSIS (5) 1620, 20K FORTRAN FORMAT
OGBORE-   -DPC   OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 DISTAT, A PROGRAM TO COMPILE DISTRIBUTION STATISTICS.=
                 (5) 1620, 20K SPS
OGBORE-   -ECR   OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 EXPECTED COUNT RATE.=
                 (4) IRRADIATION STUDIES (5) 1620, 20K, TAPE FORTRAN
                    FORMAT
OGBORE-   -EEA   OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
```

127

ELEVEN ELEMENT ANALYSIS--A PROGRAM TO SOLVE SIMULTANEOUS
   LINEAR EQUATIONS OF ELEVEN ELEMENTS IN A COMPOSITE.=
(3A) SIMULTANEOUS EQUATION (4) NEURON ACTIVATION
   ANALYSIS (5) 1620, 20K FORTRAN FORMAT
OGBORE-   -ELR   OGBORN RE
             VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
             OMAHA NEB
EXTENSION TO LINEAR REGRESSION ANALYSIS OF ALL COMBINATIONS
   OF VARIABLES PROGRAM. IT COMPUTES, THE REGRESSION
   COEFFICIENT AND CORRELATION COEFFICIENT.=
(3A) REGRESSION ANALYSIS (5) 1620, 20K FORTRAN FORMAT
OGBORE-   -EP   OGBORN RE
             VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
             OMAHA NEB
ELECTROPHORETIC PATTERN.=
(5) 1620, 20K, TAPE FORTRAN FORMAT
OGBORE-   -FMC   OGBORN RE
             VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
             OMAHA NEB
FACTOR MULTIPLIER, 7 COLUMN.=
(4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORCOM
OGBORE-   -FMM   OGBORN RE
             VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
             OMAHA NEB
FACTOR MULTIPLIER--MULTIPLIES VARIABLE NUMBER OF CHANNELS
   BY A COMMON FACTOR.=
(4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
   FORMAT
OGBORE-   -HEP   OGBORN RE
             VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
             OMAHA NEB
IN-HOUR EQUATION--A PROGRAM TO DETERMINE EXCESS REACTIVITY
   WHEN REACTOR PERIOD IS KNOWN.=
(4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
   FORMAT
OGBORE-   -IA   OGBORN RE
             VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
             OMAHA NEB
ISOTOPE ACCOUNTABILITY.=
(4) RADIATION BIOLOGY (5) 1620, 20K FORTRAN FORMAT
OGBORE-   -IRT   OGBORN RE
             VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
             OMAHA NEB
INFORMATION RETRIEVAL THIS PROGRAM SEARCHES 3-CARD
   DESCRIPTOR OF ARTICLE TO PREPARE BIBLIOGRAPHY WITH 1
   TO 6 REQUIREMENTS FOR INCLUSION.=
(4) INFORMATION RETRIEVAL (5) 1620, 20K FORCOM
OGBORE-   -LRA   OGBORN RE
             VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
             OMAHA NEB
LINEAR REGRESSION ANALYSIS OF ALL COMBINATIONS OF
   VARIABLES.=
(3A) REGRESSION ANALYSIS (5) 1620, 20K FORTRAN FORMAT
OGBORE-   -LSF   OGBORN RE

128

```
                    VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 LEAST SQUARE. FINDS LINEAR EQUATION Y EQUALS MX PLUS B.=
                 (3A) REGRESSION ANALYSIS (5) 1620, 20K FORTRAN FORMAT
OGBORE-  -MCM    OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 MATRIX COEFFICIENT AND MASS RATIO GENERATOR--A PROGRAM
                    WHICH PREPARES MATRIX COEFFICIENTS AND MASS RATIOS
                    FOR ELEVEN ELEMENT ANALYSIS PROGRAM.=
                 (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
                    FORMAT
OGBORE-  -MDS    OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 MASS DETERMINATION BY STRIPPING, SIMPLIFIED VERSION.=
                 (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
                    FORMAT
OGBORE-  -NTG    OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 NORMAL TABLE GENERATOR.=
                 (3A) STATISTICS (5) 1620, 20K FORTRAN FORMAT
OGBORE-  -P      OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 PROBABILITY.=
                 (3A) PROBABILITY (5) 1620, 20K FORTRAN FORMAT
OGBORE-  -PAP    OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 PROBIT ANALYSIS PART I.=
                 (3A) PROBIT ANALYSIS (4) LETHAL DOSE RATE ANALYSIS
                    (5) 1620, 20K FORTRAN FORMAT
OGBORE-  -PMS    OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 PROGRAM FOR MEANS AND STANDARD DEVIATIONS FROM SINGLE CARD.=
                 (3A) DESCRIPTIVE STATISTICS (5) 1620, 20K FORTRAN FORMAT
OGBORE-  -POF    OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 PHASE ONE FLUX CORRECTED--A PROGRAM TO COMPUTE A STANDARD
                    SPECTRUM FROM VARIABLE NUMBER OF CASES.=
                 (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
                    FORMAT
OGBORE-  -PTP    OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
                 PHASE TWO--A PROGRAM TO COMPUTE HALF-LIFE OF EACH CHANNEL
                    OF A SPECTRUM.=
                 (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
                    FORMAT
OGBORE-  -RCI    OGBORN RE
```

```
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
               REACTOR CREATED ISOTOPE PRODUCTION AND DISPOSITION RECORD
                 --COMPUTES ACTIVITY OF SAMPLE, PRODUCED AND DISPOSED WITH
                 DETAIL AND/OR CONSOLIDATED INFORMATION.=
               (5) 1620, 20K FORCOM
OGBORE-   -RCV OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
               RED CELL VOLUME.=
               (5) 1620, 20K, TAPE FORTRAN FORMAT
OGBORE-   -RIC OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
               REGION ISOTOPE CONTENT.=
               (4) IRRADIATION STUDIES (5) 1620, 20K, TAPE FORTRAN
                    FORMAT
OGBORE-   -SAP OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
               SPECTRA ADDER--A PROGRAM WHICH ADDS INDIVIDUAL SPECTRA
                 TO CREATE A THEORETICAL COMPOSITE SPECTRUM.=
               (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
                    FORMAT
OGBORE-   -SAV OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
               SAMPLE ACTIVITY--VARIABLE TIME--A COMPUTER PROGRAM TO
                 DETERMINE ACTIVITY OF NEURON IRRADIATED SAMPLE FOR
                 VARIABLE IRRADIATION TIMES.=
               (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
                    FORMAT
OGBORE-   -SLL OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
                    OMAHA NEB
               SEMI-LOG LEAST SQUARE METHOD.=
               (3A) REGRESSION ANALYSIS (5) 1620, 20K FORTRAN FORMAT
OGBORE-   -SRM OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
                    OMAHA NEB
               STATISTICAL ROUTINE (MEAN, STANDARD DEVIATION, T-TEST).=
               (3A) STATISTICS (5) 1620, 20K FORTRAN FORMAT
OGBORE-   -SSA OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
               SATURATION, SPECIFIC ACTIVITY, FLUX, SAMPLE ACTIVITY--THE
                 PROGRAM DETERMINES EITHER SATURATION, SPECIFIC ACTIVITY
                 OR SAMPLE ACTIVITY OF A SAMPLE OR THE NEUTRON FLUX
                 THAT THE SAMPLE WAS EXPOSED TO.=
               (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K, TAPE FORTRAN
                    FORMAT
OGBORE-   -SSR OGBORN RE
                    VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                    OMAHA NEB
```

```
                    STACY SPECIAL (REACTOR ISOTOPE ACCOUNT)--THE PROGRAM
                      PREPARES YEAR TOTAL OF ACTIVITY PER ELEMENT.=
                    (4) GENERATION OF RECORDS AND/OR REPORTS (5) 1620,
                      20K FORTRAN FORMAT
OGBORE-  -TST      OGBORN RE
                      VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                      OMAHA NEB
                    TWO SIGMA TEST FOR THREE AREAS AND NTAPES--A PROGRAM WHICH
                      COMPUTES MEAN, STANDARD DEVIATION, AND COMPARES EACH
                      SAMPLE AGAINST PLUS OR MINUS 2 SIGMA (CHAUVENET TEST).=
                    (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN
                      FORMAT
OGBORE-  -TTF      OGBORN RE
                      VA HOSP RADIOISOTOPE SVCE OMAHA NEB
                    T-TEST, F-TEST, CHI-SQUARE TEST.=
                    (3A) STATISTICS (5) 1620, 20K, FORTRAN FORMAT
OGBORE-  -VAU      OGBORN RE
                      VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
                      OMAHA NEB
                    VARIANCE ANALYSIS (FROM UCRBL 0014).=
                    (3A) ANALYSIS OF VARIANCE (5) 1620, 20K FORTRAN FORMAT
OGBORE-01-MDS      OGBORN RE
                      VA HOSPITAL RADIOISOTOPE SERVICE 4101 WOOLWORTH AVE
                      OMAHA NEB
                    MASS DETERMINATION BY STRIPPING--A PROGRAM TO SOLVE
                      COMPOSITE SAMPLE OF RADIOACTIVITY BY FINDING CLEAR
                      PEAK RATIOS AND STRIPPING ELEMENTS OFF COMPOSITE.=
                    (4) NEURON ACTIVATION ANALYSIS (5) 1620, 20K FORTRAN    01
                      FORMAT
OGBORE-01-PAP      OGBORN RE
                      VA HOSPITAL RADIOISOTOPE SVCE 4101 WOOLWORTH AVE
                      OMAHA NEB
                    PROBIT ANALYSIS PART II.=
                    (3A) PROBIT ANALYSIS (4) LETHAL DOSE RATE ANALYSIS       01
                      (5) 1620, 20K FORTRAN FORMAT
OVERJE-  -ACC      OVERALL JE
                      U OF TEX MED BRANCH RESEARCH COMPUTATION CTR GALVESTON
                    AUTO AND CROSS CORRELATION ANALYSIS OF MULTIPLE TIME SERIES.
                    (3A) CORRELATION (4) TIME SERIES (5) IBM 1620 IBM 1410
OVERJE-  -BCP      OVERALL JE
                      U OF TEX RESEARCH COMPUTATION CTR GALVESTON TEX
                    BAYESIAN CONDITIONAL PROBABILITY DIAGNOSTIC CLASSIFICATION.=
                    (3A) CONDITIONAL PROBABILITY (4) DIAGNOSIS (5) IBM 1620
                      IBM 1410
OVERJE-  -EDF      OVERALL JE
                      U OF TEX MEDICAL BRANCH RESEARCH COMPUTATION CTR
                      GALVESTON TEX
                    EUCLIDIAN DISTANCE FUNCTION CLASSIFICATION.=
                    (5) IBM 1620, IBM 1410
OVERJE-  -FAC      OVERALL JE
                      U OF TEX MED BRANCH RESEARCH COMPUTATION CTR GALVESTON
                    FREQUENCY ANALYSIS OF CORRELOGRAM FUNCTIONS.=
                    (3A) FREQUENCY ANALYSIS (5) IBM 1620 IBM 1410
OVERJE-  -FAQ      OVERALL JE
```

```
                    U OF TEXAS MED BRANCH RESEARCH COMPUTATION CTR
                    GALVESTON TEX
               FREQUENCY ANALYSIS OF QUALITATIVE DATA WITH CHI-SQUARE
                  TESTS.=
               (3A) TEST OF HYPOTHESES (5) IBM 1620 IBM 1410
OVERJE-  -GLC  OVERALL JE
                    U OF TEX MED BRANCH RESEARCH COMP CTR GALVESTON TEX
               GENERAL LINEAR COMPONENTS ANALYSIS.=
               (3A) COMPONENT ANALYSIS (5) IBM 1620 IBM 1410
OVERJE-  -LDF  OVERALL JE
                    U OF TEX MED BRANCH RESEARCH COMP CTR GALVESTON TEX
               INTERBATTERY DIAD FACTOR ANALYSIS.=
               (3A) FACTOR ANALYSIS (4) BEHAVIORAL SCIENCES-PSYCHOLOGY
                  (5) IBM 1620 IBM 1410
OVERJE-  -LSL  OVERALL JE
                    U OF TEX RESEARCH COMP CTR GALVESTON TEX
               LEAST SQUARES LINEAR, EXPONENTIAL AND POWER CURVE
                  FITTING.=
               (3A) CURVE FITTING (5) IBM 1620, IBM 1410
OVERJE-  -MCA  OVERALL JE
                    U OF TEXAS RESEARCH COMPUTATION CTR GALVESTON TEX
               MULTIPLE COVARIANCE ANALYSIS.=
               (3A) ANALYSIS OF COVARIANCE (3B) UP TO 10 COVARIATES
                  (5) IBM 1620 IBM 1410
OVERJE-  -MPI  OVERALL JE
                    U OF TEXAS MED BRANCH RESEARCH COMPUTATION CTR
                    GALVESTON TEX
               MULTIPLE PAIRED AND INDEPENDENT T-TESTS FOR UP TO 10
                  VARIABLES REPEATED OVER TIME.=
               (3A) TEST OF HYPOTHESES (3B) UP TO 10 VARIABLES (5) IBM
                  1620, IBM 1410
OVERJE-  -MRP  OVERALL JE
                    U OF TEX RESEARCH COMP CTR GALVESTON TEX
               MULTIPLE REGRESSION PROGRAM.=
               (3A) REGRESSION ANALYSIS (3B) UP TO 20 INDEPENDENT
                  VARIABLES, UP TO 5 DEPENDENT VARIABLES (5) IBM 1620,
                  IBM 1410
OVERJE-  -NVP  OVERALL JE
                    U OF TEX MEDICAL BRANCH RESEARCH COMPUTATION CTR
                    GALVESTON TEX
               NORMALIZED VECTOR PRODUCT MULTIVARIATE PROFILE
                  CLASSIFICATION.=
               (3A) PROFILE ANALYSIS (4) PROFILE CLASSIFICATION
                  PSYCHOLOGY (5) IBM 1620, IBM 1410
OVERJE-  -NVR  OVERALL JE
                    U OF TEX MED BRANCH RESEARCH COMP CTR GALVESTON TEX
               NORMALIZED VARIMAX ROTATION OF FACTOR SOLUTIONS.=
               (3A) FACTOR ANALYSIS (4) BEHAVIORAL SCIENCES-PSYCHOLOGY
                  (5) IBM 1620 IBM 1410
OVERJE-  -OPT  OVERALL JE
                    U OF TEX RESEARCH COMP CTR GALVESTON TEX
               ORTHOGONAL POLYNOMIAL TREND ANALYSIS.=
               (5) IBM 1620, IBM 1410
OVERJE-  -OWA  OVERALL JE
```

132

```
                    U OF TEXAS RESEARCH COMPUTATION CTR GALVESTON TEX
              ONE-WAY ANALYSIS OF VARIANCE.=
              (3A) ANALYSIS OF VARIANCE (3B) UP TO 20 VARIABLES
                (5) IBM 1620 IBM 1410
OVERJE-  -PAF OVERALL JE
                    U OF TEX MED BRANCH RESEARCH COMP CTR GALVESTON TEX
              PRINCIPAL AXES FACTOR ANALYSIS.=
              (3A) FACTOR ANALYSIS (4) BEHAVIORAL SCIENCES-PSYCHOLOGY
                (5) IBM 1620 IBM 1410
OVERJE-  -PCC OVERALL JE
                    U OF TEX MEDICAL BRANCH RESEARCH COMPUTATION CTR
                    GALVESTON TEX
              PROFILE CORRELATION CLASSIFICATION.=
              (3A) PROFILE ANALYSIS (4) PSYCHOLOGY (5) IBM 1620 IBM 1410
OVERJE-  -PMC OVERALL JE
                    U OF TEX MED BRANCH RESEARCH COMPUTATION CTR GALVESTON
                    TEX
              PRODUCT MOMENT CORRELATION MATRICES.=
              (3A) CORRELATION (5) IBM 1620, IBM 1410
OVERJE-  -PVF OVERALL JE
                    U OF TEX MED BRANCH RESEARCH COMP CTR GALVESTON TEX
              POWERED VECTOR FACTOR ANALYSIS.=
              (3A) FACTOR ANALYSIS (4) BEHAVIORAL SCIENCES-PSYCHOLOGY
                (5) IBM 1620 IBM 1410
OVERJE-  -SDA OVERALL JE
                    U OF TEX MED BRANCH RESEARCH COMPUTATION CTR GALVESTON
              SPECTRAL DENSITY ANALYSIS OF TIME SERIES.=
              (3A) SPECTRAL DENSITY ANALYSIS (4) EEG ANALYSIS TIME
                SERIES (5) IBM 1620 IBM 1410
OVERJE-  -SOW OVERALL JE
                    U OF TEXAS RESEARCH COMPUTATION CTR GALVESTON TEX
              SIMPLE ONE-WAY ANALYSIS OF COVARIANCE.=
              (3A) ANALYSIS OF VARIANCE (3B) UP TO 20 VARIABLES (5) IBM
                1620 IBM 1410
OVERJE-  -SRM OVERALL JE
                    U OF TEX MED BRANCH RESEARCH COMPUTATION CTR GALVESTON
              SQUARE ROOT MATRIX INVERSION.=
              (3A) MATRIX ALGEBRA (5) IBM 1620, IBM 1410
OVERJE-  -STT OVERALL JE
                    U OF TEXAS MED BRANCH RESEARCH COMPUTATION CTR
                    GALVESTON TEX
              STUDENT T-TEST.=
              (3A) TEST OF HYPOTHESES (3B) UP TO 100 DIFFERENT VARIABLES
                (5) IBM 1620, IBM 1410
OVERJE-  -TCA OVERALL JE
                    U OF TEX MED BRANCH RESEARCH COMPUTATION CTR GALVESTON
              TREND CORRECTED AUTO AND CROSS CORRELATION ANALYSIS.=
              (3A) AUTO AND CROSS CORRELATION (4) EEG ANALYSIS (5) IBM
                1620 IBM 1410
OVERJE-  -TWA OVERALL JE
                    U OF TEXAS RESEARCH COMPUTATION CTR GALVESTON TEX
              TWO-WAY ANALYSIS OF VARIANCE FOR UNEQUAL AND
                DISPROPORTIONATE CELL FREQUENCIES.=
              (3A) ANALYSIS OF VARIANCE (5) IBM 1620 IBM 1410
```

```
OVERJE-01-TWA   OVERALL JE
                    U OF TEXAS RESEARCH COMPUTATION CTR GALVESTON TEX
                THREE-WAY ANALYSIS OF VARIANCE FOR PROPORTIONATE CELL
                    FREQUENCIES.=
                (3A) ANALYSIS OF VARIANCE (3B) UP TO 20 VARIABLES           01
                    (5) IBM 1620 IBM 1410
OVERJE-02-TWA   OVERALL JE
                    U OF TEXAS RÉSEARCH COMPUTATION CTR GALVESTON TEX
                TWO-WAY ANALYSIS OF VARIANCE FOR PROPORTIONATE CELL
                    FREQUENCIES.=
                (3A) ANALYSIS OF VARIANCE (3B) UP TO 20 VARIABLES           02
                    (5) IBM 1620 IBM 1410
PARNBL-  -ASR   PARNELL BL
                    AF INST OF PATHOLOGY WASHINGTON DC
                ACTUARIAL SURVIVAL RATE COMPUTATION.=
                    (5) MONROBOT XI
PARNBL-  -MR    PARNELL BL
                    AF INST OF PATHOLOGY WASHINGTON DC
                MORTALITY RATES.=
                    (5) MONROBOT XI
PARNBL-  -TFA   PARNELL BL
                    AF INST OF PATHOLOGY WASHINGTON DC
                TRIGONOMETRIC FUNCTIONS ACCORDING TO BRAGG'S LAW FOR THE
                    ANALYSIS OF CRYSTAL STRUCTURES.=
                    (5) MONROBOT XI
PATTAL-  -INA   PATTERSON AL
                    INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                ICR NO 10 'ABSORPTION FACTORS FOR A CRYSTAL GROUND AS AN
                    ALLIPSOID OF REVOLUTION'.=
                (4) CANCER RESEARCH (5) IBM 1620, 20K, PAPER TAPE I/O
PATTAL-  -IND   PATTERSON AL
                    INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                ICR NO 11 'DATA REDUCTION FOR THE GE GENIOSTAT'.=
                (4) CANCER RESEARCH (5) IBM 1620, 20K, PAPER TAPE I/O
PATTAL-  -INF   PATTERSON AL
                    INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                ICR NO 6 'FOURIER DATA TAPE MAKER'.=
                (4) CANCER RESEARCH (5) IBM 1620, 20K, PAPER TAPE I/O
PATTAL-  -INI   PATTERSON AL
                    INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                ICR NO 13-14 'INTERATOMIC DISTANCES AND ANGLES'.=
                (4) CANCER RESEARCH (5) IBM 1620, 20K, PAPER TAPE I/O
PATTAL-  -INL   PATTERSON AL
                    INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                ICR NO 8 'LEAST-SQUARE PLANE PROGRAM'.=
                (3A) PLANE REGRESSION (4) CANCER RESEARCH (5) IBM 1620,
                    20K, PAPER TAPE I/O
PATTAL-  -INM   PATTERSON AL
                    INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                ICR NO 15 'MINIMUM FUNCTION PROGRAM'.=
                (4) CANCER RESEARCH (5) IBM 1620, 20K, PAPER TAPE I/O
PATTAL-  -INP   PATTERSON AL
                    INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                ICR NO 9 'POINT-BY-POINT FOURIER IN ANY PLANE'.=
```

```
                      (4) CANCER RESEARCH (5) IBM 1620, 20K, PAPER TAPE I/O
PATTAL-  -INS    PATTERSON AL
                      INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                 ICR NO 4 ':STRUCTURE FACTOR PROGRAM AND LEAST-SQUARES
                      SUM MAKER'.=
                      (4) CANCER RESEARCH (5) IBM 1620, 20K, PAPER TAPE I/O
PATTAL-  -INT    PATTERSON AL
                      INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                 ICR NO 1 'THREE AND TWO DIMENSIONAL FOURIER SUMMATION
                      PROGRAM'.=
                      (3A) FOURIER SUMMATION (4) CANCER RESEARCH (5) IBM 1620,
                      20K, PAPER TAPE I/O
PATTAL-  -INW    PATTERSON AL
                      INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                 ICR NO 12 'WEISSENBERG DATA REDUCTION ROUTINE'.=
                      (4) CANCER RESEARCH (5) IBM 1620, 20K, PAPER TAPE I/O
PATTAL-01-INL    PATTERSON AL
                      INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                 ICR NO 7 'LEAST-SQUARES SUM SOLVER AND PARAMETER SHIFTER'.=
                      (3A) LEAST SQUARES (4) CANCER RESEARCH (5) IBM 1620,     01
                      20K, PAPER TAPE I/O
PATTAL-01-INS    PATTERSON AL
                      INST FOR CANCER RESEARCH 7701 BURHOLME AVE PHILA PA
                 ICR NO 2 'SINGLE CRYSTAL ORIENTER (GENIOSTAT) COORDINATES'.=
                      (4) CANCER RESEARCH (5) IBM 1620, 20K, PAPER TAPE I/O    01
PETETI-  -NLE    PETERSON TI
                      IBM, MATHEMATICS AND APPLICATIONS DEPT NYC
                 A NON-LINEAR ESTIMATION PROGRAM.=
                      (3A) LEAST SQUARES (5) IBM 704, 8K, SAP (6) AMERICAN INST
                      OF CHEMICAL ENG 25 W 45 ST NYC
PIPBHV-  -UCI    PIPBERGER HV
                      VA HOSPITAL WASHINGTON DC
                 USE OF COMPUTERS IN INTERPRETATION OF ELECTROCARDIOGRAMS)=
                      (3A) PATTERN RECOGNITION (4) CARDIOGRAPHY (5) IBM 7090 NBS
                      (6) STALLMAN FW, PIPBERGER HV--AUTOMATIC RECOGNITION OF
                      ELECTROCARDIOGRAPHIC WAVES BY DIGITAL COMPUTER.
                      CIRCULATION RESEARCH VOL 9 P 1138 1961
POWEWE-  -RDI    POWERS WE
                      U OF WASHINGTON SCHOOL OF MEDICINE ST LOUIS MO
                 RADIATION DISTRIBUTION OF IMPLANTS.=
                      (3B) NUMBER OF NEEDLES LESS THAN OR EQUAL TO 25-NUMBER OF
                      DIFF NEEDLES LESS THAN OR EQUAL TO 20-NUMBER OF DIFF
                      SHIELDS LESS THAN OR EQUAL TO 5-NUMBER OF DIFF
                      ISOTOPES LESS THAN OR EQUAL TO 5 (4) RADIATION
                      BIOLOGY (5) IBM 7072, 10K, FLAG SYSTEM
PR LLI-  -AVC    PR LIB--MONROBOT XI
                 ANALYSIS OF VARIANCE AND COVARIANCE.=
                      (3A) ANALYSIS OF VARIANCE AND COVARIANCE (5) MONROBOT XI
PR LLI-  -CST    PR LIB--MONROBOT XI
                 CHI-SQUARE TEST.=
                      (3A) TEST OF HYPOTHESES (5) MONROBOT XI
PR LLI-  -LSA    PR LIB--MONROBOT XI
                 LEAST SQUARES APPROXIMATION WITH FLOATING POINT.=
                      (3A) LEAST-SQUARES ESTIMATION (5) MONROBOT XI
```

```
PR LLI-    -RCA    PR LIB--MONROBOT XI
                   REGRESSION AND CORRELATION ANALYSIS.=
                   (3A) REGRESSION AND CORRELATION ANALYSIS (5) MONROBOT XI
PR LLI-    -SST    PR LIB--MONROBOT XI
                   STUDENT'S T-TEST.=
                   (3A) TEST OF HYPOTHESES (5) MONROBOT XI
PULLG -    -PHA    PULLEY G
                       OKLAHOMA STATE U COMPUTING CTR STILLWATER OKLA
                   A PROGRAM FOR HIERARCHICAL ANALYSIS OF VARIANCE, HI-AOV.=
                   (3A) ANALYSIS OF VARIANCE (3B) UP TO TEN VARIABLES
                       SIMULTANEOUSLY (5) IBM 650, IAS CORE, 3 INDEX REGISTERS,
                       FLOATING POINT, IBM 533 READ-PUNCH UNIT
RCA EL-    -EA     RCA ELECTRONIC DATA PROCESSING DIV
                       CAMDEN NJ
                   EEG ANALYSIS.=
                   (3A) LINEAR DISCRIMINANT FUNCTION ANALYSIS (3B) SIX
                       CHANNELS (4) EEG ANALYSIS (5) RCA 354 (6) PRELIMINARY
                       ANNU REPORT FEB 1963
RHEIWC-    -MMP    RHEINVOLDT WC
                       U OF MD COMPUTER SCIENCE CTR COLLEGE PARK MD
                   A MATHEMATICAL MODEL OF THE PROPAGATION PROCESS OF
                       STIMULI OVER HEART TISSUE.=
                   (5) IBM 650 TAPE IBM 7090
ROSEG -    -CTO    ROSE G
                       NYU COMPUTER CTR 400 E 34 ST NYC
                   CROSS-TABULATION (WITH OR WITHOUT CHI-SQUARE).=
                   (5) CDC 1604
ROSEG -    -FAR    ROSE G
                       NYU COMPUTER CTR 400 E 34 ST NYC
                   FACTOR ANALYSIS (REAL OR COMPLEX).=
                   (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) CDC 1604
ROSEG -    -MGD    ROSE G
                       NYU COMPUTER CTR NYC
                   MULTIPLE GROUP DISCRIMINANT ANALYSIS.=
                   (3A) DISCRIMINANT ANALYSIS (5) CDC 1604
ROSEG -    -SFA    ROSE G
                       NYU COMPUTER CTR NYC
                   SPECTRAL AND FOURIER ANALYSIS.=
                   (3A) FOURIER ANALYSIS (4) EEG ANALYSIS TIME SERIES (5) CDC
                       1604
ROSEG -    -SRR    ROSE G
                       NYU COMPUTER CTR 400 E 34 ST NYC
                   STEPWISE REGRESSION (REAL OR COMPLEX).=
                   (3A) REGRESSION (5) CDC 1604
ROSEG -    -VST    ROSE G
                       NYU COMPUTER CTR 400 E 34 ST NYC
                   VECTOR SIGNIFICANCE TESTS.=
                   (3A) FACTOR ANALYSIS (5) CDC 1604
ROSEMA-    -FFC    ROSENFELD MA
                   FREQUENCY FUNCTION COMPUTATIONS.=
                   (3A) BASIC STATISTICS COMPUTATION (3B) TRANSFORMATION OF
                       INPUT DATA ALLOWED, UP TO 8000 ITEMS OF UNGROUPED DATA
                       UP TO 100 CLASSES OF GROUPED DATA (5) IBM 704, 32K,
                       6 TAPES, BENSON-LEHNER MODEL J-ELECTROPLOTTER-FORTRAN
```

```
                        (6) AMERICAN INST OF CHEM ENGRS 25 W 45 ST NYC
SAKOJM-   -AWA    SAKODA JM
                        BROWN U DEPT SOCIOLOGY AND ANTHROPOLOGY PROVIDENCE RI
                  ANVA4--A 4-WAY ANALYSIS OF VARIANCE PROGRAM.=
                  (3A) ANALYSIS OF VARIANCE (5) FORTRAN
SAKOJM-   -CFC    SAKODA JM
                        BROWN U DEPT OF SOCIOLOGY AND ANTHROPOLOGY PROVIDENCE RI
                  COUNT-A FREQUENCY COUNT DISTRIBUTION PROGRAM USING UNIT
                    CLASS INTERVALS.=
                  (3A) FREQUENCY COUNT (5) FORTRAN
SAKOJM-   -CPC    SAKODA JM
                        BROWN U DEPT OF SOCIOLOGY AND ANTHROPOLOGY PROVIDENCE RI
                  COR70-- A PROGRAM TO CALCULATE PRODUCT MOMENT CORRELATION
                    COEFFICIENTS.=
                  (3A) CORRELATION (3B) UP TO 70 VARIABLES, OUTPUT INCLUDES
                    MEANS, STD DEV, CORRELATION MATRIX (5) FORTRAN
SAKOJM-   -GGC    SAKODA JM
                        BROWN U DEPT OF SOCIOLOGY AND ANTHROPOLOGY PROVIDENCE RI
                  GCODE-GENERAL CODING AND FREQUENCY DISTRIBUTION ROUTINE.=
                  (5) FORTRAN
SAKOJM-   -MMC    SAKODA JM
                        BROWN U DEPT OF SOCIOLOGY AND ANTHROPOLOGY PROVIDENCE RI
                  MCORR--A MULTIPLE CORRELATION AND REGRESSION ANALYSIS.=
                  (3A) REGRESSION ANALYSIS (3B) UP TO 29 INDEPENDENT
                    VARIABLES (5) FORTRAN
SAKOJM-   -TTS    SAKODA JM
                        BROWN U DEPT OF SOCIOLOGY AND ANTHROPOLOGY PROVIDENCE RI
                  TABSM-A TABLE SUMMARY PROGRAM WHICH MAKES TABLES FOR ALL
                    POSSIBLE COMBINATIONS OF CONTROL VARIABLES.=
                  (5) FORTRAN
SAKOJM-   -XGC    SAKODA JM
                        BROWN U DEPT OF SOCIOLOGY AND ANTHROPOLOGY PROVIDENCE RI
                  XCLAS-A GENERA CROSS CLASSIFICATION PROGRAM WHICH CROSS-
                    CLASSIFIES GIVEN VARIABLES BY OTHER VARIABLES.=
                  (5) FORTRAN
SAKOJM-   -ZCZ    SAKODA JM
                        BROWN U DEPT OF SOCIOLOGY AND ANTHROPOLOGY PROVIDENCE RI
                  Z CCOR A ZERO CELL CORRELATION ROUTINE THAT COMPUTES CORR
                    COEFF.=
                  (3A) CORRELATION ANALYSIS (3B) ALLOWS FOR MISSING DATA
                    (5) FORTRAN
SAUNDR-   -PFB    SAUNDERS DR
                        EDUCATIONAL TESTING SVCE PRINCETON NJ
                  A PROGRAM TO FIND BEST FITTING ORTHOGONAL FACTORS FOR A
                    GIVEN HYPOTHESIS.=
                  (3A) FACTOR ANALYSIS (4) PSYCHOLOGY (5) IBM 650
                    (6) BEHAVIORAL SCIENCE VOL 5 P 272 JULY 1960
SCHAKW-   -UUM    SCHAIE KW
                        U OF NEBRASKA COMPUTING CTR LINCOLN NEB
                  UN 14, UN 36 MULTIVARIATE PREDICTION PROGRAMS.=
                  (3A) CORRELATION (4) BEHAVIORAL SCIENCE (5) BURROUGHS 205,
                    CARDS (6) BEHAVIORAL SCIENCE VOL 8 P 170-172 APRIL 1963
SCHAKW-   -UUU    SCHAIE KW
                        U OF NEBRASKA COMPUTING CTR LINCOLN NEB
```

UN-12, UN-13, UN-15, UN-16, UN-17 PRODUCT MOMENT CORRELATION
   PROGRAMS.=
(3A) CORRELATION (5) BURROUGHS 205, CARDS (6) BEHAVIORAL
   SCIENCE VOL 7 P 499-500 OCT 1962

SCHRND- -PTS   SCHROLLER ND
        COMPUTER CTR CORPUS CHRISTI TEX
A PROGRAM FOR TIME SERIES COMPONENTS ANALYSIS.=
(3A) TIME SERIES (3B) UP TO 48 MONTHS OF DATA (4) ECO
   FORECASTING (5) BURROUGHS 205 PAPER TAPE INPUT NUMERIC
   CARD OUTPUT MACHINE LANGUAGE (6) SHISKIN ELECTRONIC
   COMPUTERS AND BUSINESS INDICATORS OCCASIONAL PAPER 57
   PUBL NAT BUR ECO RESEARCH

SHAP - -EPA   SHAPIRO
        WASHINGTON U SEVER INSTITUTE OF TECH ST LOUIS MO
        --(PR LIB) WASHINGTON U COMPUTING FACILITIES
AN EEG PERIOD ANALYSIS PROGRAM.=
(3A) FREQUENCY COUNTS OF BASE LINE CROSSINGS ZERO
   CROSSINGS OF FIRST DERIVATIVE (3B) TYPEWRITER OUTPUT--
   MAX OF 15 VARIABLE FREQ BANDS (4) EEG ANALYSIS (5) IBM
   1620/1311, 40K, MONITOR 1

SHAPDM- -EPA   SHAPIRO DM
        WASHINGTON U SEVER INST OF TECH ST LOUIS MO--(PR LIB)
        WASHINGTON U COMPUTING FACILITIES
AN EEG PERIOD ANALYSIS PROGRAM.=
(3B) ADDITIONAL OUTPUT FOR GRAPHING ON 1620 BY MEANS OF
   DISK (4) EEG ANALYSIS (5) IBM 7072, 6 TAPES, 10K FLAG
   SYSTEM FORTRAN

SHUMKE- -CCP   SHUMATE KE
        WASHINGTON U SEVER INSTITUTE OF TECH ST LOUIS MO
        --(PR LIB) WASHINGTON U COMPUTING FACILITIES
A CANONICAL CORRELATION PRGM.=
(3A) CANONICAL ANALYSIS (3B) NO OF VARIABLES ON LEFT (M1)
   LESS THAN 26 NO OF VARIABLES ON RIGHT (M2) LESS THAN 26
   M1 PLUS M2 LESS THAN 51 (4) BEHAVIORAL SCIENCES
   CORRELATION BETWEEN CRITERIA AND PREDICTOR MEASURES
   (5) IBM 7072 10K TAPE FLAG SYSTEM FORTRAN

SHUMKE- -EMR   SHUMATE KE
        U OF WASHINGTON SEVER INST OF TECH ST LOUIS MO--(PR LIB)
        U OF WASHINGTON COMPUTER CTR
EXPERIMENTAL MULTIPLE REGRESSION ANALYSIS PROGRAM, XRAP.=
(3A) REGRESSION ANALYSIS (3B) OBSERVATIONS LESS THAN
   10,000, VARIABLES LESS THAN 72, TRANSFORMED VARIABLES
   LESS THAN 100 (5) IBM 7072, 10K, 5 OR 6 TAPE DRIVES ONLINE

SMITWN- -PCM   SMITH WN
        DOW CHEMICAL CO FREEPORT TEX
A PROGRAM COMPARISON OF MEANS (SCHEFFE TEST).=
(3A) TESTS OF HYPOTHESES (3B) UP TO 500 DATA PER SET, UP
   TO 500 DATA PER SET, UP TO 100 SETS OF DATA
   (5) BURROUGHS 205, FLOATING POINT, CARD, PSEUDO CODE
   (6) AMERICAN INST CHEMICAL ENG 25 W 45 ST NYC

SMITWN- -PDO   SMITH WN
        A PROGRAM FOR THE DESIGN OPTIMUM MULTIFACTORIAL
        EXPERIMENTS
A PROGRAM FOR THE DESIGN OF OPTIMUM MULTIFACTORIAL

138

```
                    EXPERIMENTS.=
                    (3A) STEEPEST ASCENT, ANALYSIS OF VARIANCE (4) STATISTICAL
                    DESIGN OF EXPERIMENTS (5) IBM 650, SOAP 1, BURROUGHS 205
                    MACHINE LANGUAGE (6) PLACKETT RL, BURMAN JP 'DESIGN OF
                    OF OPTIMUM MULTIFACTORIAL EXPERIMENTS' BIOMETRIKA 1946
                    VOL 33 P 305-325
STEIFE-  -CA      STEIDLER FE
                    PRODUCTS RESEARCH DIV ESSO RESEARCH AND ENG CO LINDEN NJ
                  CANONICAL ANALYSIS.=
                    (3A) CANONICAL ANALYSIS (3B) UP TO 100 VARIATES
                     (4) BEHAVIORAL SCIENCES CORRELATION BETWEEN CRITERIA
                    AND PREDICTOR MEASURES (5) IBM 7090, 32K, 5 TAPES
                     (6) AMER INST CHEM ENG 25 W 45 ST NYC
STEIFE-  -MRA     STEIDLER FE
                    ESSO RESEARCH AND ENGINEERING PRODUCTS RESEARCH DIV
                    LINDEN NJ
                  MULTIPLE REGRESSION ANALYSIS.=
                    (3A) REGRESSION (3B) UP TO 130 VARIABLES (5) IBM 7090, 32K
                     6 TAPES FORTRAN II (6) BEHAVIORAL SCIENCE VOL 8 P 174
                    APRIL 1963 AMERICAN INST OF CHEMICAL ENGRS 25 W 45 ST
                    NYC
STEIFE-  -PCF     STEIDLER FE
                    PRODUCTS RESEARCH DIV ESSO RESEARCH AND ENG CO LINDEN NJ
                  A PRINCIPAL COMPONENT AND FACTOR ANALYSIS PROGRAM.=
                    (3A) VON NEUMANN-GOLDSTINE MODIFICATION OF THE JACOBI
                    METHOD FACTOR ANALYSIS (5) IBM 7090, 32K, 6 TAPES
                    FORTRAN II (6) AMERICAN INST CHEMICAL ENG 25 W 45 ST NYC
STERT -  -IMI     STERLING T
                    U OF CINCINNATI MED COMP CTR COL OF MED CINCINNATI O
                  IMP021--A MATRIX INVERSION PROGRAM.=
                    (3A) MATRIX ALGEBRA (3B) UP TO A 12BT 12 MATRIX--OUTPUT
                    IN FLOATING POINT (5) IBM 1401, 4K (6) MEDCOMP HANDBOOK
                    OF COMPUTER APPLICATIONS IN BIOLOGY AND MED PART 1
                    STATISTICAL SYSTEMS
STERT -  -MAC     STERLING T
                    U OF CINCINNATI COLLEGE OF MED, MEDICAL COMPUTING
                    CTR CINCINNATI O
                  IMP018--AN ANALYSIS OF COVARIANCE PROGRAM FOR A
                    MULTIGROUP SYSTEM.=
                    (3A) ANALYSIS OF COVARIANCE (3B) SIX DIGIT DATA WITH UP TO
                     99,999 TOTAL NUMBER OF OBSERVATIONS (5) IBM 1401, 4K
                     (6) MEDCOMP HANDBOOK OF COMPUTER APPLICATIONS IN
                    BIOLOGY AND MED PART 1 STATISTICAL SYSTEMS
STERT -  -MCC     STERLING T
                    U OF CINCINNATI MED COMPUTING CTR COLLEGE OF MED
                    CINCINNATI O
                  IMP002 A CORRELATION COEFFICIENTS PROGRAM THAT COMPUTES
                    THE COEFFICIENTS FOR ASYMMETRICAL PAIRED DATA GROUPINGS.=
                    (3A) CORRELATION ANALYSIS (3B) UP TO 15 VARIABLES (5) IBM
                    1401, 4K (6) MEDCOMP HANDBOOK OF COMPUTER APPLICATIONS
                    IN BIOLOGY AND MED PART I STATISTICAL SYSTEMS
STERT -  -MFD     STERLING T
                    U OF CINCINNATI COLLEGE OF MED MEDICAL COMPUTING CTR
                    CINCINNATI O
```

1MP003-A FREQUENCY DISTRIBUTION PROGRAM.=
(3B) ONE VARIABLE AT A TIME UP TO 99,999 OBSERVATIONS
ANSWERS GIVEN TO FIVE DECIMAL PLACES; UP TO 15 INTERVALS
MAY BE HANDLED (5) IBM 1401 4K (6) MEDCOMP HANDBOOK OF
COMPUTER APPLICATIONS IN BIOLOGY AND MED PART I
STATISTICAL SYSTEMS

STERT - -MFS   STERLING T
U OF CINCINNATI COLLEGE OF MED MEDICAL COMPUTING
CTR CINCINNATI O
1MP016--FISHER'S EXACT TEST TO TEST THE PROBABILITY OF THE
FREQUENCIES IN THE CELLS COMING FROM DIFFERENT
POPULATIONS.=
(3A) TEST OF STATISTICAL HYPOTHESES (3B) UP TO 100
OBSERVATIONS (5) IBM 1401, 4K (6) MEDCOMP HANDBOOK OF
COMPUTER APPLICATIONS IN BIOLOGY AND MED PART 1
STATISTICAL SYSTEMS

STERT - -MHG   STERLING T
U OF CINCINNATI COLLEGE OF MED MEDICAL COMPUTING CTR
CINCINNATI O
1MP022-A HISTOGRAM GENERATING PROGRAM.=
(3B) INPUT REQUIRED-RANGE AND LOCATION OF DATA, INTERVAL
SIZE UP TO 100 INTERVALS WITH AS MANY AS 50 OBSERVATIONS
PER INTERVAL (5) IBM 1401 4K (6) MEDCOMP HANDBOOK OF
COMPUTER APPLICATIONS IN BIOLOGY AND MED PART I
STATISTICAL SYSTEMS

STERT - -MLF   STERLING T
U OF CINCINNATI O MED COMPUTING CTR COLLEGE OF MEDICINE
1MP004 A LINEAR FIT PROGRAM WITH T-TEST.=
(3A) REGRESSION ANALYSIS (5) IBM 1401, 4K (6) MEDCOMP
HANDBOOK OF COMPUTER APPLICATIONS IN BIOLOGY AND MED
PART 1 STATISTICAL SYSTEMS

STERT - -MLS   STERLING T
U OF CINCINNATI COL OF MED MEDICAL COMPUTING CTR
CINCINNATI O
1MP007--A LATIN SQUARE PROGRAM.=
(3A) ANALYSIS OF VARIANCE (3B) UP TO A 10 BY 10 MATRIX
(4) EXPERIMENTAL DESIGN (5) IBM 1401, 4K (6) MEDCOMP
HANDBOOK OF COMPUTER APPLICATIONS IN BIOLOGY AND MED
PART 1 STATISTICAL SYSTEMS

STERT - -MMR   STERLING T
U OF CINCINNATI O COLLEGE OF MEDICINE MEDICAL COMPUTING
1MP012--A MULTIPLE REGRESSION PROGRAM.=
(3A) REGRESSION ANALYSIS (3B) UP TO 20 INDEPENDENT
VARIABLES (5) IBM 1401, 4K (6) MEDCOMP HANDBOOK OF
COMPUTER APPLICATIONS IN BIOLOGY AND MED PART I
STATISTICAL SYSTEMS

STERT - -MMT   STERLING T
U OF CINCINNATI COLLEGE OF MED MEDICAL COMPUTING
CTR CINCINNATI O
1MP015--MARSHALL TEST PROGRAM TESTS THE HYPOTHESIS THAT
ONE OF TWO RANDOM VARIABLES IS STOCHASTICALLY LARGER
THAN THE OTHER.=
(3A) TEST OF STATISTICAL HYPOTHESES (3B) UP TO 99,999
PIECES OF 5 DIGIT DATA FOR EACH OF THE TWO VARIABLES

```
                          DIVIDED IN AS MANY AS 20 CELLS (5) IBM 1401, 4K
                          (6) MEDCOMP HANDBOOK OF COMPUTER APPLICATIONS IN BIOLOGY
                          AND MED PART 1 STATISTICAL SYSTEMS
STERT - -MOW     STERLING T
                          U OF CINCINNATI COLLEGE OF MED, MEDICAL COMPUTING
                          CTR CINCINNATI O
                 1MP005--ONE WAY ANALYSIS OF VARIANCE PROGRAM THAT
                          COMPUTES MEANS, STD. ERROR, VARIANCE BETWEEN AND
                          WITHIN GROUPS, COMPARES WITH F-TEST.=
                          (3A) TEST OF STATISTICAL HYPOTHESIS, ANALYSIS OF VARIANCE
                          (3B) UP TO 100 GROUPS (5) IBM 1401, 4K (6) MEDCOMP
                          HANDBOOK OF COMPUTER APPLICATIONS IN BIOLOGY AND MED
                          PART I STATISTICAL SYSTEMS
STERT - -MPC     STERLING T
                          U OF CINCINNATI COLLEGE OF MED, MEDICAL COMPUTING
                          CTR CINCINNATI O
                 1MP008--A PROGRAM TO COMPUTE SUMMARY TABLE FOR REPLICATED
                          2 WAY ANALYSIS OF VARIANCE.=
                          (3A) TEST OF STATISTICAL HYPOTHESES, ANALYSIS OF VARIANCE
                          (3B) DATA ENTERED IN 6 DIGIT FORM, UP TO A 10 ROW BY 20
                          COLUMN NETWORK, UP TO 10,000 OBSERVATIONS PER ROW
                          AND 1000 PER COLUMN (5) IBM 1401, 4K (6) MEDCOMP HANDBOOK
                          OF COMPUTER APPLICATIONS IN BIOLOGY AND MED PART I
                          STATISTICAL SYSTEMS
STERT - -MPD     STERLING T
                          U OF CINCINNATI COLLEGE OF MED, MEDICAL COMPUTING
                          CTR CINCINNATI O
                 1MP006--A PROGRAM TO DEVELOP AND PRINT A SUMMARY TABLE FOR
                          UNREPLICATED 2 WAY ANALYSIS OF VARIANCE.=
                          (3A) TEST OF STATISTICAL HYPOTHESES, ANALYSES OF VARIANCE
                          (3B) UP TO 90 ROWS AND 90 COLUMNS (5) IBM 1401, 4K
                          (6) MEDCOMP HANDBOOK OF COMPUTER APPLICATIONS IN
                          BIOLOGY AND MED PART I STATISTICAL SYSTEMS
STERT - -MPF     STERLING T
                          U OF CINCINNATI O MED COMPUTING CTR COLLEGE OF MEDICINE
                 1MP013 A POLYNOMIAL FIT PROGRAM.=
                          (3A) REGRESSION ANALYSIS (3B) UP TO 5 POLYNOMIALS AT LEAST
                          7 OBSERVATIONS OF THE DEPENDENT AND INDEPENDENT
                          VARIABLES (5) IBM 1401, 4K (6) MEDCOMP HANDBOOK OF
                          COMPUTER APPLICATIONS IN BIOLOGY AND MED PART 1
                          STATISTICAL SYSTEMS
STERT - -MPT     STERLING T
                          U OF CINCINNATI COLLEGE OF MED MEDICAL COMPUTING
                          CTR CINCINNATI O
                 1MP030--A PROGRAM TO TEST FOR DIFFERENCES BETWEEN MEANS
                          WITH HETEROGENEOUS VARIANCE.=
                          (3A) TEST OF STATISTICAL HYPOTHESES (3B) NO LIMIT ON NO OF
                          GROUPS (5) IBM 1401, 4K (6) MEDCOMP HANDBOOK OF COMPUTER
                          APPLICATIONS IN BIOLOGY AND MED PART 1 STATISTICAL
                          SYSTEMS
STERT - -MQB     STERLING T
                          U OF CINCINNATI COLLEGE OF MED MEDICAL COMPUTING
                          CTR CINCINNATI O
                 1MP02Q--BARTLETT TEST-A PROGRAM TO TEST WHETHER TWO OR
```

141

```
                   MORE VARIANCES DIFFER SIGNIFICANTLY (CHI-SQUARED).=
                   (3A) TEST OF STATISTICAL HYPOTHESES (5) IBM 1401, 4K
                    (6) MEDCOMP HANDBOOK OF COMPUTER APPLICATIONS IN BIOLOGY
                   AND MED PART 1 STATISTICAL SYSTEMS
STERT -  -MSP   STERLING T
                   U OF CINCINNATI COLLEGE OF MED MEDICAL COMPUTING CTR
                   CINCINNATI O
                1MP010-A SCATTER PROGRAM.=
                   (3B) MAGNITUDE OF DATA BETWEEN 10 TO THE 5TH POWER TO
                   10 TO THE MINUS 7TH POWER (5) IBM 1401, 4K (6) MEDCOMP
                   HANDBOOK OF COMPUTER APPLICATIONS IN BIOLOGY AND MED
                   PART I STATISTICAL SYSTEMS
STERT -  -MWA   STERLING T
                   U OF CINCINNATI COLLEGE OF MED, MEDICAL COMPUTING
                   CTR CINCINNATI O
                1MP009--A 3 WAY ANALYSIS OF VARIANCE WITH AND WITHOUT
                   REPLICATION.=
                   (3A) TEST OF STATISTICAL HYPOTHESES, ANALYSIS OF VARIANCE
                    (3B) INPUT DATA IN 5 DIGIT FORMAT, UP TO 5 ROWS,
                   5 COLUMNS, 5 BLOCKS, UP TO 99 READINGS PER CELL
                    (5) IBM 1401, 4K (6) MEDCOMP HANDBOOK OF COMPUTER
                   APPLICATIONS IN BIOLOGY AND MED PART 1 STATISTICAL
                   SYSTEMS
STERT -  -TTT   STERLING T
                   U OF CINCINNATI COLLEGE OF MED MEDICAL COMPUTING
                   CTR CINCINNATI O
                T-TEST TO TEST THE SIGNIFICANCE OF THE DIFFERENCE
                   BETWEEN TWO MEANS.=
                   (3A) TEST OF STATISTICAL HYPOTHESIS (3B) UP TO 9999 PAIRS
                   OF OBSERVATIONS (5) IBM 1401, 4K (6) MEDCOMP HANDBOOK
                   OF COMPUTER APPLICATIONS IN BIOLOGY AND MED PART 1
                   STATISTICAL SYSTEMS
STERT -01-MPC   STERLING T
                   U OF CINCINNATI COLLEGE OF MED MEDICAL COMPUTING CTR
                   CINCINNATI O
                1MP001-A PROGRAM TO COMPUTE THE MEAN AND STANDARD
                   DEVIATION OF SEVERAL VARIABLES AND THEIR 90 PERCENT AND
                   98 PERCENT CONFIDENCE LIMITS.=
                   (3A) MEANS AND STANDARD DEVIATIONS (3B) UP TO 6 DIGITS      01
                   PER VARIABLE, UP TO 45 VARIABLES AND 9,999 OBSERVATIONS
                    (5) IBM 1401, 4K (6) MEDCOMP HANDBOOK OF COMPUTER
                   APPLICATIONS IN BIOLOGY AND MED PART I STATISTICAL
                   SYSTEMS
STERT -01-MPD   STERLING T
                   U OF CINCINNATI COLLEGE OF MED, MEDICAL COMPUTING
                   CTR CINCINNATI O
                1MP027--A PROGRAM TO DEVELOP THE ANALYSIS OF VARIANCE FOR A
                   REPLICATED TWO-DIMENSIONAL SYSTEM HAVING UNEQUAL
                   NUMBER OF OBSERVATIONS IN THE CELLS.=
                   (3A) TEST OF STATISTICAL HYPOTHESES, ANALYSIS OF VARIANCE 01
                    (3B) UP TO 10 ROWS AND 20 COLUMNS, UP TO 10,000
                   OBSERVATIONS PER ROW AND 1000 PER COLUMN (5) IBM 1401,
                   4K (6) MEDCOMP HANDBOOK OF COMPUTER APPLICATIONS IN
                   BIOLOGY AND MED PART 1 STATISTICAL SYSTEMS
```

```
STERT -01-MPT    STERLING T
                     U OF CINCINNATI MED COMPUTING CTR COLLEGE OF MED
                     CINCINNATI O
                 1MP024 A PROGRAM THAT COMPUTES BISERIAL CORRELATION
                   COEFFICIENTS FOR DISCRETE, BISTABLE (YES OR NO) DATA.=
                 (3A) CORRELATION ANALYSIS (3B) UP TO 10,000 ENTRIES PER    01
                   CELL UP TO 19 X-Y SYSTEMS PER RUN (5) IBM 1401, 4K
                   (6) MEDCOMP HANDBOOK OF COMPUTER APPLICATIONS IN
                   BIOLOGY AND MED PART I STATISTICAL SYSTEMS
STERT -01-MWA    STERLING T
                     U OF CINCINNATI COLLEGE OF MED. MEDICAL COMPUTING
                     CTR CINCINNATI O
                 1MP028--3 WAY ANALYSIS OF VARIANCE WITH REPLICATION AND
                   MISSING DATA.=
                 (3A) TEST OF STATISTICAL HYPOTHESES, ANALYSIS OF VARIANCE 01
                   (3B) UP TO 9 ROWS, COLUMNS AND BLOCKS, UP TO 99 READINGS
                   PER CELL (5) IBM 1401, 4K (6) MEDCOMP HANDBOOK OF
                   COMPUTER APPLICATIONS IN BIOLOGY AND MED PART 1
                   STATISTICAL SYSTEMS
STERT -02-MPT    STERLING T
                     U OF CINCINNATI COLLEGE OF MED MEDICAL COMPUTING CTR
                     CINCINNATI O
                 1MP014-A PROGRAM THAT GENERATES FREQUENCY TABLES.=
                 (3B) UP TO 12 BY 12 TABLE (5) IBM 1401, 4K (6) MEDCOMP     02
                   HANDBOOK OF COMPUTER APPLICATIONS IN BIOLOGY AND MED
                   PART I STATISTICAL SYSTEMS
STERTD-  -APR    STERLING TD
                     U OF CINCINNATI MEDICAL COMPUTING CTR AND DEPT OF
                     RADIOLOGY COLLEGE OF MED CINCINNATI O
                 AN AUTOMATION PROGRAM OF RADIATION TREATMENT PLANNING.=
                 (4) RADIOLOGY (5) IBM 1401 IBM 7040 (6) FOR PROGRAM
                   WRITE AUTHOR
STOCFD-  -PAV    STOCKTON FD
                 A PROGRAM FOR ANALYSIS OF VARIANCE.=
                 (3A) ANALYSIS OF VARIANCE (3B) UP TO 1600 DATA ENTRIES
                   (5) IBM 650, SOAP II, ALPHABETIC DEVICE (6) BEHAVIORAL
                   SCIENCE VOL 8 P 370 OCT 1961, AMERICAN INST OF CHEM
                   ENG 25 W 45 ST NYC
SULZES-  -CDS    SULZER ES
                     U OF MINN MED SCHOOL DEPT OF PSYCHIATRY AND NEUROLOGY
                     MINNEAPOLIS MINN
                 COMPUTATION OF DIFFERENCE SCORES AND SUMS OF DIFFERENCE
                   SCORES ON THE MMPI.=
                 (4) PSYCHOLOGY (5) CDC-1604 FORTRAN, PROGRAM ORIGINALLY
                   WRITTEN FOR IBM 1620
SULZES-  -CPV    SULZER ES
                     U OF MINNESOTA MED SCHOOL MINNEAPOLIS MINN
                 CALCULATION OF P-VALUES FOR FISHER'S F TEST GIVEN THE F
                   STATISTIC AND THE DEGREES OF FREEDOM.=
                 (3A) TEST OF HYPOTHESES (5) CDC-1604 FORTRAN
SULZES-  -FFS    SULZER ES
                     U OF MINN MED SCHOOL DEPT OF PSYCHIATRY AND NEUROLOGY
                     MINNEAPOLIS MINN
                 FITTING FOURIER SERIES TO ANY PERIODIC FUNCTION OR TIME
```

```
                    SERIES.=
                    (4) TIME SERIES (5) CDC 1604 FORTRAN
SULZES-  -PAQ   SULZER ES
                    U OF MINN MED SCHOOL DEPT OF PSYCHIATRY AND NEUROLOGY
                    MINNEAPOLIS MINN
                PROBIT ANALYSIS OF QUANTAL BIOASSAY WITH A SINGLE
                    TREATMENT.=
                    (3A) PROBIT ANALYSIS (5) CDC-1604 FORTRAN
SULZES-  -PCC   SULZER ES
                    U OF MINNESOTA MED SCHOOL DEPT OF PSYCHIATRY AND
                    NEUROLOGY MINNEAPOLIS MINN
                A PROGRAM TO COMPUTE THE CONCENTRATION OF SMALL
                    PARTICLES OR MICROBES IN A SOLUTION AS ANALYZED BY THE
                    SERIAL DILUTION METHOD.=
                    (5) CDC-1604 FORTRAN
SULZES-  -PCF   SULZER ES
                    U OF MINN MED SCHOOL DEPT OF PSYCHIATRY AND NEUROLOGY
                    MINNEAPOLIS MINN
                A PROGRAM TO COMPUTE FOUR SQUARE DETERMINANTS.=
                    (5) CDC-1604 FORTRAN
SULZES-  -PCO   SULZER ES
                    U OF MINNESOTA MED SCHOOL MINNEAPOLIS MINN
                A PROGRAM TO CALCULATE THE ORDINATE OF THE CHI-SQUARED
                    DISTRIBUTION GIVEN THE NUMBER OF DEGREES OF FREEDOM
                    AND THE VALUE OF THE CHI-SQUARE.=
                    (3A) TEST OF HYPOTHESES (5) CDC-1604 FORTRAN
SULZES-  -PFS   SULZER ES
                    U OF MINNESOTA MED SCHOOL MINNEAPOLIS MINN
                PERFORMANCE OF FISHER'S TEST OR THE CLASSICAL CHI-SQUARED
                    TEST ON A FOUR FOLDTABLE.=
                    (3A) TEST OF HYPOTHESES (5) CDC-1604 FORTRAN
SULZES-01-PCO   SULZER ES
                    U OF MINNESOTA MED SCHOOL MINNEAPOLIS MINN
                A PROGRAM TO CALCULATE THE ORDINATE OF STUDENT'S T
                    DISTRIBUTION GIVEN THE NUMBER OF DEGREES OF FREEDOM
                    AND THE VALUE OF T.=
                    (3A) TEST OF HYPOTHESES (5) CDC-1604 FORTRAN          01
TANIT -  -MDP   TANIMOTO T
                    IBM YORKTOWN HGTS NY
                A MEDICAL DIAGNOSIS PROGRAM.=
                    (3A) PROBABILITY/CLASSIFICATION (4) DIAGNOSIS (5) IBM 704
                    (6) TANIMOTO T 'IBM TYPE 704 MEDICAL DIAGNOSIS PROGRAM'
                    IRE TRANS VOL ME-7 NO 4 OCT 1960
U OFOF-  -ACP   U OF WASHINGTON SEVER INSTITUTE OF TECH ST LOUIS MO--
                    (PR LIB) U OF WASHINGTON COMPUTING FACILITIES
                AN ANALYSIS OF COVARIANCE PROGRAM.=
                    (3A) ANALYSIS OF COVARIANCE (3B) MAX NO OF REPLICATIONS
                    999 TWO TO SIX VARIABLES CAN BE PROCESSED WITH AS
                    MANY AS FIVE COVARIATES (5) IBM 7072, 10K, 4 TAPES,
                    FLAG SYSTEM, FORTRAN
U OFOF-  -GUF   U OF CHICAGO BIOLOGICAL SCIENCES COMP CTR CHICAGO ILL
                GO UCM F02 LIFE TABLE AND SURVIVAL RATE.=
                    (5) FORTRAN PROGRAM
U OFOF-01-GUF   U OF CHICAGO BIOLOGICAL SCIENCES COMPUTATION CTR U OF
```

```
                         CHICAGO-CHICAGO ILL
                         G2 UCM F02 REGRESSION ON PRIMARY PRINCIPAL COMPONENTS.=
                         (3A) REGRESSION ON PRINCIPAL COMPONENTS (5) FORTRAN        01
                            PROGRAM
      UHR L -  -GIP      UHR L
                            U OF MICHIGAN ANN ARBOR MICH
                         A GENERAL INTERCORRELATION PROGRAM.=
                         (3A) CORRELATION (PEARSON) (3B) 2-DIGIT NUMBERS INPUT
                            (4) GENERAL (5) IBM 650 (6) BEHAVIORAL SCIENCE VOL 4
                            P 255 JULY 1959 AMERICAN DOCUMENTATION INST LC WASH DC
                            DOC 5927
      VANDJM-  -CPO      VANDERPLAS JM
                            U OF WASHINGTON SEVER INST OF TECH ST LOUIS MO--(PR LIB)
                            WASHINGTON U COMPUTER CTR
                         A CORRELATION PROGRAM WITH OBSERVATIONS MISSING CWOM.=
                         (3A) CORRELATION (3B) MISSING OBSERVATIONS ALLOWED UP TO
                            200 VARIABLES ANY NUMBER OF OBSERVATIONS LESS THAN 10
                            EXP 10 ON ANY OF THE VARIABLES (5) IBM 7072, 10K,
                            5 TAPES ON LINE
      VANDSG-  -CPC      VANDENBERG SG
                            U OF MICHIGAN ANN ARBOR MICH
                         A COMPUTER PROGRAM TO CALCULATE CC PETER'S INDEX OF
                            CURVILINEARITY.=
                         (3A) CORRELATION ANALYSIS (5) IBM 650 (6) BEHAVIORAL
                            SCIENCE VOL 4 P 255-256 JULY 59 AMERICAN DOCUMENTATION
                            INST LC WASH DC DOC 5929
      VANDSG-  -VQR      VANDENBERG SG
                            U OF MICHIGAN ANN ARBOR MICH
                         VARIMAX AND QUARTIMAX ROTATIONS.=
                         (3A) FACTOR ANALYSIS (3B) UP TO 953 ELEMENTS IN THE
                            ORIGINAL MATRIX NO OF ELEMENTS AND NO OF VARIABLES UP TO
                            999 ELEMENTS (4) PSYCHOLOGY (5) IBM 650 (6) BEHAVIORAL
                            SCIENCES VOL 5 P 99 JAN 1960 LC WASH DC DOC 6108
      VELDDJ-  -A        VELDMAN DJ
                            U OF TEXAS AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
                         ANOVA 23.=
                         (3A) ANALYSIS OF VARIANCE (3B) UP TO 100 TEST SCORES MAY
                            BE ANALYZED IN ONE MACHINE PASS (4) BEHAVIORAL SCIENCES
      VELDDJ-  -APD      VELDMAN DJ
                            U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                            COLLEGE OF EDUCATION
                         AUTOCROS--A PROGRAM TO DETECT CYCLIC FLUCTUATIONS IN
                            REPEATED MEASUREMENTS OF THE SAME SUBJECT.=
                         (3A) CORRELATION ANALYSIS (4) TO DETECT DELAYED
                            REACTION EFFECTS FROM EXPERIMENTAL MANIPULATIONS--OF USE
                            IN BEHAVIORAL SCIENCES
      VELDDJ-  -API      VELDMAN DJ
                            U OF TEXAS DEPT EDUCATIONAL PSYCHOLOGY
                         ABSTRAC A PROGRAM FOR INTERCORRELATION PRINCIPAL AXIS
                            FACTOR ANALYSIS, VARIMAX ROTATION AND FACTOR SCORE
                            COMPUTATION.=
                         (3A) FACTOR ANALYSIS (3B) UP TO 100 VARIABLES
                            (4) PSYCHOLOGY (5) CDC 1604 FORTRAN (6) BEHAVIORAL
                            SCIENCE VOL 8 P 81 JAN 1963
```

```
VELDDJ-  -C    VELDMAN DJ
                   U OF TEX AUSTIN TEX--(PR LIB) COLLEGE OF ED
               COREL.=
               (3A) PEARSON PRODUCT MOMENT CORRELATION (3B) ALL SUBJECTS
                  MUST HAVE COMPLETE DATA (4) TO GET PEARSON PRODUCT
                  MOMENT CORRELATIONS BETWEEN ALL POSSIBLE PAIRING OF A
                  SET OF VARIABLES. OF USE IN BEHAVIORAL SCIENCES
VELDDJ-  -CPG  VELDMAN DJ
                   U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                   COLLEGE OF EDUCATION
               COMPILE, A PROGRAM TO GET FREQUENCY DISTRIBUTIONS AND
                  STATISTICS.=
               (3A) FREQUENCY DISTRIBUTIONS (3B) 20 ITEM QUESTIONNAIRE
                  WITH 5-POINT AGREEMENT SCALES (4) BEHAVIORAL SCIENCES
VELDDJ-  -CPP  VELDMAN DJ
                   U OF TEX DEPT EDUCATIONAL PSYCHOLOGY
               CORMAT--A PROGRAM FOR PRODUCT-MOMENT INTERCORRELATION
                  TETRACHORIC APPROXIMATIONS AND ELEMENTARY LINKAGE
                  ANALYSIS.=
               (3A) CORRELATION ANALYSIS (3B) UP TO 100 VARIABLES
                  (4) PSYCHOLOGY (5) CDC 1604 FORTRAN (6) BEHAVIORAL
                  SCIENCE VOL 8 P 81 JAN 63
VELDDJ-  -CPT  VELDMAN DJ
                   U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                   COLLEGE OF EDUCATION
               CANON--A PROGRAM THAT ATTEMPTS TO ANSWER THE QUESTION
                  'WHAT ARE THE ESSENTIAL DIMENSIONS OF CORRESPONDENCE
                  AMONG TWO SETS OF VARIABLES'.=
               (4) PSYCHOLOGY-COMPARISON OF SCALES OF DIFFERENT TESTS
                  (6) SEE ROBERT JONES DISSERTATION (1963), HUMAN TALENT
                  PROJECT
VELDDJ-  -D    VELDMAN DJ
                   U OF TEX COLLEGE OF EDUCATION AUSTIN TEX
               DISCRIM.=
               (3A) DISCRIMINANT ANALYSIS (3B) NUMBER OF SUBJECTS IN
                  EACH GROUP NEED NOT BE EQUAL (4) BEHAVIORAL SCIENCES--TO
                  DETERMINE THE EXTENT TO WHICH A SET OF PREDICTOR
                  VARIABLES ARE ABLE TO DIFFERENTIATE AMONG A GIVEN SET
                  OF A PRIORI-DEFINED SUBJECT GROUPS (6) COOLEY WW,
                  LOHNES PR 'MULTIVARIATE PROCEDURES FOR THE BEHAVIORAL
                  SCIENCES' WILEY (1962)
VELDDJ-  -DPP  VELDMAN DJ
                   U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                   COLLEGE OF EDUCATION
               DISTAN-A PROGRAM TO PROVIDE INFORMATION CONCERNING THE
                  SHAPE OF DISTRIBUTIONS.=
               (3B) CONVERTS RAW SCORES TO M EQUALS 25, S EQUALS 5
                  COMPUTES AND PRINTS FREQUENCIES AND RAW SCORE
                  EQUIVALENTS FOR SCORES FROM 0 TO 50 FOR EACH VARIABLE
                  (4) BEHAVIORAL SCIENCES
VELDDJ-  -FFA  VELDMAN DJ
                   U OF TEX AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
               FACTSCOR--A FACTOR ANALYSIS PROGRAM.=
               (3A) FACTOR ANALYSIS (4) BEHAVIORAL SCIENCES--THE PROGRAM
```

```
                    PRODUCES PUNCHED OUTPUT CARDS FOR EACH SUBJECT WITH
                    COMPOSITE SCORES ESTIMATING HIS POSITION ON EACH OF THE
                    FACTOR DIMENSIONS REPRESENTED IN THE INPUT LOADINGS
VELDDJ-   -FPP    VELDMAN DJ
                    U OF TEX AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
                  FACTOR--A PACKAGE PROGRAM TO PRODUCE (A) INTERCORRELATION
                    (B) PRINCIPAL AXIS FACTOR ANALYSIS (C) ORTHOGONAL
                    VARIMAX ROTATION.=
                  (3A) FACTOR ANALYSIS (4) BEHAVIORAL SCIENCES (A) DATA
                    REDUCTION (B) HYPOTHESIS TESTING (C) HYPOTHESIS
                    SEARCHING
VELDDJ-   -GPP    VELDMAN DJ
                    U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                    COLLEGE OF EDUCATION
                  GLASCOR--THE PROGRAM PRODUCES DISCRIMINANT FUNCTION
                    SCORES, CHI-SQUARES REGARDING GROUP MEMBERSHIP AND
                    PROBABILITIES OF MEMBERSHIP IN EACH GROUP.=
                  (3A) DISCRIMINANT ANALYSIS (4) BEHAVIORAL SCIENCES
                    (6) COOLEY WW, LOHNES PR 'MULTIVARIATE PROCEDURES FOR
                    THE BEHAVIORAL SCIENCES' WILEY (1962)
VELDDJ-   -GPW    VELDMAN DJ
                    U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                    COLLEGE OF EDUCATION
                  GROUP--A PROGRAM WHICH PERFORMS A COMPLETE HIERARCHIAL
                    GROUPING ANALYSIS BASED ON DISTANCES IN TEST SPACE.=
                  (3A) CLASSIFICATION ANALYSIS (4) BEHAVIORAL SCIENCES
                    (6) ROUTINE ORIGINALLY DEVELOPED BY JOE WARD (RD160V)
VELDDJ-   -LCP    VELDMAN DJ
                    U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                    COLLEGE OF EDUCATION
                  LINKAGE A CLUSTERINE PROGRAM.=
                  (3A) CLUSTER ANALYSIS (4) BEHAVIORAL SCIENCES
VELDDJ-   -LML    VELDMAN DJ
                    U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                    COLLEGE OF EDUCATION
                  LINEARV-A MULTIPLE LINEAR REGRESSION ANALYSIS PROGRAM.=
                  (3A) MULTIPLE LINEAR REGRESSION ANALYSIS (4) BEHAVIORAL
                    SCIENCES (6) BOTTENBERG AND WARD'S APPLIED MULTIPLE
                    LINEAR REGRESSION TECHNIQUE
VELDDJ-   -M      VELDMAN DJ
                    U OF TEX AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
                  MISCOREL.=
                  (3A) PEARSON PRODUCT MOMENT CORRELATION (3B) ALL ZERO OR
                    BLANK SCORE FIELDS ARE IGNORED. VARIABLES WITH
                    MEANINGFUL ZERO SCORES CANNOT BE ANALYZED WITH THIS
                    PROGRAM (4) BEHAVIORAL SCIENCES
VELDDJ-   -MPC    VELDMAN DJ
                    U OF TEX AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
                  MATCH--A PROGRAM TO COMPUTE A MATRIX OF COSINES OF ANGLES
                    BETWEEN ALL COMBINATIONS OF FACTOR-VECTORS FROM TWO
                    INDEPENDENT FACTOR ANALYSES.=
                  (3A) FACTOR ANALYSIS (3B) COEFFICIENTS SHOULD BE OVER .90
                    BEFORE IDENTITY OF FACTORS IS ASSUMED (4) BEHAVIORAL
                    SCIENCES
```

```
VELDDJ-  -MSM   VELDMAN DJ
                  U OF TEX AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
                MISCORP (SIMILAR TO MISCOREL).=
                (3A) CORRELATION ANALYSIS (3B) OUTPUT IS PUNCHED. USED AS
                   DIRECT ENTRY TO FACT FORM (4) BEHAVIORAL SCIENCES
VELDDJ-  -RAV   VELDMAN DJ
                  U OF TEXAS AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
                REANOVA--AN ANALYSIS OF VARIANCE PROGRAM.=
                (3A) ANALYSIS OF VARIANCE (4) BEHAVIORAL SCIENCES TO
                   STUDY DIFFERENCES AMONG TREATMENTS WHERE EACH SUBJECT
                   RECEIVES ALL TREATMENTS
VELDDJ-  -RPC   VELDMAN DJ
                  U OF TEX AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
                REGRES A PROGRAM TO COMPUTE MULTIPLE CORRELATION
                   COEFFICIENTS.=
                (3A) CORRELATION ANALYSIS
VELDDJ-  -RPY   VELDMAN DJ
                  U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                   COLLEGE OF EDUCATION
                REGSCOR--A PROGRAM TO YIELD PREDICTED CRITERION SCORES.=
                (3B) USES PUNCHED OUTPUT FROM REGRES AND RAW DATA CARDS
                   (4) BEHAVIORAL SCIENCES
VELDDJ-  -S     VELDMAN DJ
                  U OF TEXAS AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
                STAT.=
                (3A) ANALYSIS OF VARIANCE (4) TO GET BASIC STATISTICS ON
                   DISTRIBUTIONS OF SCORES, TO GET SUM X AND X SQUARED FOR
                   FOR CELLS IN A COMPLEX ANALYSIS OF VARIANCE OF USE IN
                   BEHAVIORAL SCIENCES
VELDDJ-  -SPC   VELDMAN DJ
                  U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                   COLLEGE OF EDUCATION
                STANDARD-A PROGRAM TO OBTAIN COMPARABLY LOCATED AND
                   DISPERSED DISTRIBUTION FROM ANY SET OF RAW-SCORE
                   DISTRIBUTION.=
                (3B) SUBJECT IDENTIFICATION MUST BE READ BEFORE
                   SPECIFICATION OF SCORES (4) BEHAVIORAL SCIENCES
VELDDJ-  -TPC   VELDMAN DJ
                  U OF TEX AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
                TRANFACT--A PROGRAM TO CARRY OUT A TRANSPOSED FACTOR
                   ANALYSIS OF PERSONS, RATHER THAN OF TESTS.=
                (3A) FACTOR ANALYSIS (3B) INPUT IDENTICAL WITH FACTOR
                   (4) BEHAVIORAL SCIENCES--PSYCHOLOGY
VELDDJ-01-APD   VELDMAN DJ
                  U OF TEXAS AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
                ANOVA--A PROGRAM TO DETECT DIFFERENCES IN CENTRAL
                   TENDENCIES AMONG A SET OF SUBJECT GROUPS ON A SERIES OF
                   DEPENDENT VARIABLES.=
                (3A) ANALYSIS OF VARIANCE (3B) NO OF SUBJECTS IN VARIOUS  01
                   GROUPS NEED NOT BE EQUAL (4) BEHAVIORAL SCIENCES
VELDDJ-01-CPP   VELDMAN DJ
                  U OF TEX COLLEGE OF EDUCATION AUSTIN TEX--(PR LIB)
                   COLLEGE OF EDUCATION
                CENTILE-A PROGRAM TO PROVIDE CONVERSION TABLES FOR
```

RAW-SCORE DISTRIBUTIONS.=
(4) BEHAVIORAL SCIENCES

VELDDJ-01-FFA VELDMAN DJ
U OF TEX AUSTIN TEX--(PR LIB) COLLEGE OF EDUCATION
FACTORX--A FACTOR ANALYSIS PROGRAM.=
(3A) FACTOR ANALYSIS (3B) OUTPUT IS USED WITH FACTSCOR TO 01
OBTAIN VARIMAX ROTATED FACTOR SCORES (4) BEHAVIORAL
SCIENCES--PSYCHOLOGY

WALKG - -PIA WALKER G
U OF WASHINGTON
PARTIAL ITEM ANALYSIS.=
(3A) ITEM ANALYSIS (4) PSYCHOLOGY (5) IBM 650
(6) BEHAVIORAL SCIENCE VOL 5 P 268 JULY 1960

WALKJR- -PSC WALKER JR
CELANESE CHEMICAL CO DATA PROCESSING SYSTEM POB 561
CORPUS CHRISTI TEX
A PROGRAM FOR SELECTIVE CURVE SET.=
(3A) METHOD OF ZERO MOMENTS (3B) COEFF FOR 36 EQ ARE
COMPUTED (5) BURROUGHS 205, PAPER TAPE MACHINE LANGUAGE
(6) BEHAVIORAL SCIENCE VOL 6 P 167 APRIL 1961 AMER INST
OF CHEM ENGR 25 W 45 ST NYC

WEXLJD- -MSI WEXLER JD
ARIZONA STATE U TEMPE ARIZ
MAPS A SYSTEM OF INTERRELATED PROGRAM FOR FACTOR
ANALYSIS.=
(3A) FACTOR ANALYSIS (3B) WILL COMPUTE-CORR COEFF (UP TO
650 VARIABLES), TETRACHORIC CORR, PRINCIPAL COMPONENTS,
ROTATION OF FACTORS (KAISER) (UP TO 78 VARIABLES)
(4) PSYCHOLOGY (5) IBM 704 8K   DRUM 6 TAPES
(6) COMPLETE DESCRIPTION FROM PUBLICATIONS OFFICE ARIZONA
STATE U TEMPE ARIZ

WHITJR- -QQA WHITTLESEY JRB
UCLA DEPT OF PSYCHIATRY AND WDPC LOS ANGELES CAL
QUAP-4--QUESTIONNAIRE ANALYSIS PROGRAM 1.=
(3A) PROFILE ANALYSIS (3B) UP TO 66 QUESTIONS-UP TO
100,000 PARTICIPANTS-OUTPUT ON MAG TAPE (4) PSYCHOLOGY
(5) IBM 709 (6) BEHAVIORAL SCIENCE VOL 5 P 100 JAN 1960
WRITE TO AUTHOR FOR DETAILS

WILKT - -CAS WILKES T
CASE INST TECHNOLOGY, SYSTEMS RESEARCH CTR CLEVELAND O
COMPUTER ANALYSIS OF SPECTROGRAPHIC DATA.=
(3A) MINIMIZATION OF THE RMS ERROR (4) DETERMINATION OF
CONCENTRATION OF SUBSTANCES IN SOLUTIONS

WILLBJ- -PRT WILLIAMS BJ
A PROGRAM FOR A REGRESSION TRANSFORMATION OF
PSYCHOPHYSIOLOGIC DATA.=
(3A) REGRESSION (3B) UP TO 800 PAIRS FOR 1620-20K-UP TO
2800 PAIRS FOR 1620-60K (5) IBM 1620, 60K, AUTOMATIC
DIVIDE, INDIRECT ADDRESSING IBM 1622 READ-PUNCH FORTRAN
(6) BEHAVIORAL SCIENCE VOL 8 P 82 JAN 1963

WOLFR - -TPT WOLF R
U OF CHICAGO GRADUATE SCHOOL OF ED
TSSA2--A PROGRAM FOR TEST SCORING TEST ANALYSIS ITEM
ANALYSIS AND FACTOR ANALYSIS AND ROTATION.=

(3A) FACTOR ANALYSIS TEST SCORING (4) PSYCHOLOGY
    BEHAVIORAL SCIENCES (5) IBM 7090 (6) BEHAVIORAL SCIENCE
    VOL 8 NO 4 OCT 1963 PROGRAM FROM U OF CHICAGO INST FOR
    COMPUTER RESEARCH CHICAGO ILL

YERUJ - -PCF   YERUSHALMY J
                U OF CAL SCHOOL OF PUBLIC HEALTH BERKELEY CAL
            A PROGRAM TO COMPUTE FREQUENCIES, PERCENT DISTRIBUTION,
                RATES AND MEANS.=
            (3A) DESCRIPTIVE STATISTICS (3B) NINE VARIABLES 36 ITEMS
                PER VARIABLE (5) IBM 7090, FORTRAN II AND FAP

APPENDIX I

BIOMEDICAL COMPUTER PROGRAM LIBRARY FORM

<u>PROGRAM LIBRARY NO.</u>

1. Title:

2. Source:

    A. Author

    B. Address

    C. Program Library

3. Mathematical Method:

    A. General

    B. Specific Parameters

4. Application

5. Computer Configuration:

6. Publication Reference:

151

Explanation of Computer Program Library Form

1. Title of Program

   A descriptive title similar to the title of a journal article which, in a few words, sums up the content of the program and its applications.

   Example:

   > A computer program for the solution of the linear differential equations of blood flow.

   In addition, at times, a code name is included such as BMD08D or CANON, etc., which is useful when requesting information about a specific program.

2. Source

   A. Author

   An attempt is made here to provide the name of the person who will best be the source of information in the future, such as an author, a programmer, a head of a department, the director of the computing center, etc.

   B. Address

   C. Program Library

   Frequently, a program is part of a series which together constitute a package of programs. Examples of this are MEDCOMP, BMD, STATISTICAL LIBRARY OF THE ILLIAC, Users Group Library, College of Education Library, etc.

3. Mathematical Method

   A. General

   The object of this entry is to define, briefly, the mathematical method used in the program, whenever apparent or appropriate.

Examples - Analysis of variance
Regression analysis
Factor analysis

Some of the programs reported are plotting routines
(frequently count and histograms, scattergrams) or
cross-classification programs. In either case, no
particular mathematical procedure is reported.

B. Specific Parameters

Limitations of the program are specified in this section.

Examples - Maximum number of intervals equal to 5
Up to 35 independent variables
Up to 767 subjects
All subjects must have complete data
Input data in 5 digit format

4. Application

The specific biological or behavioral application is listed here.

Examples - EEG Analysis
Psychological testing
Mathematical diagnosis
Biochemistry

5. Computer Configuration

The minimum system on which the program will run is listed
along with the programming language used.

Examples - IBM 1620, 20K, cards, FORTRAN II

IBM 7072, 10K, 5 tapes on-line

Illiac

6. Publication Reference:

A reference is given to a publication describing, in detail,
where the program can be obtained.

Examples - Behavioral Science, V. 6, Oct. 1961, pp. 347-357

Available from IBM

For program, write author

153

For detailed description write to: The
American Documentation Institute, Library
of Congress, Washington 25, D. C. ,
Document 5925 ($2. 50 for photoprint).

Naturally, an attempt was made to present as complete a docu-
mentation as practicable, in the limited time allowed, on the available
computer biomedical programs. Some of the documentation is in-
complete (lack of machine specification, for instance), but it is
believed that the programs already listed constitute a large portion of
the general purpose programs in existence today. As such, they can
be used as a measure of the types of mathematical and statistical
techniques now in use by investigators in the Life and Behavorial
Sciences. Of some major importance is the availability of these pro-
grams. A short note on this subject is, no doubt, appropriate at this
point. All of the programs reported here are available to investigators.
Their availability, however, takes various forms, of which the following
are examples.

1. Program and listing available from a Users Group.

2. Program description available from a Federal distributing
    agency such as the American Documentation Institute, for
    a nominal fee.

3. Program available from the author or from a computing
    facility.

4. Listing of program reported in a publication such as
    Waxman and Bonato's General Cross-Classification
    Program, (Behavorial Science, V. 6, October, 1961,
    pp. 347-357).

APPENDIX II

1963 NIH GRANTS AND AWARDS

FOR COMPUTER AND COMPUTER-ORIENTED STUDIES

IN THE LIFE SCIENCES

ALABAMA

University of Alabama, Birmingham

Jamison, Homer C., "Applications of Electronic Computers in
   Dental Research"

"Uses of Electronic Computers in Health Research"

ARKANSAS

University of Arkansas, Little Rock

Barnhard, Howard J., "University of Arkansas Medical Center
   Computer Facility"

"Radiographic Time Lapse Study of Living Bone"

CALIFORNIA

University of California, Berkeley

Brazier, Mary A., "Correlator Studies of Brain"

Dantzig, George B., "Computer Solutions of Complex Models
   in Biology"

Lamson, Baldwin G., "Data Processing in a Medical Center:

Tryon, Rogert C., "Cluster Analysis Programs in Psychosocial
   Studies"

"Cluster Analysis Programs in Psychosocial Studies"

Wood, David A., "Electronic Computer Training and Research
   Facility"

Camarillo State Hospital, Camarillo

Graetz, Robert E., "Psychiatric Data Automation"

Memorial Hospital of Long Beach, Long Beach

Lake, Raymond B., Jr., "Data Automation Research and
Experimentation"

University of California, Los Angeles

Dixon, Wilfred J., "Followup of Colo-rectal Cancer Patients"

"Followup of Gastric Cancer Patients:

"Clinical Drug Evaluation Program - Western Region"

"Medical Data Processing Research"

Forgy, Edward W., "A Technique for Grouping"

French, John D., "Application of Computing Techniques to Brain
Function"

Loma Linda University, Los Angeles

Hon, Edward H., "Digital Computer Analysis of Fetal Heart
Rate Pattern"

"Electronic Evaluation of Fetal ECG and Heart Rate"

University of Southern California, Los Angeles

Ayres, A. Jean, "Factor Analyses of Perceptual-Motor
Functions"

Stanford Research Institute, Menlo Park

Blumberg, Mark S., "Data for Control of Hospital Medications
by Computer"

Pacific State Hospital, Pomona

Tarjan, George, "Computer Aid for Mental Retardation Research"

University of California, Santa Barbara

Rohlf, F. James, "Programming for Numerical Taxonomy"

Rand Corporation, Santa Monica

Bellman, Richard E., "Mathematical Studies of Biological Systems"

Stanford University, Stanford

Colby, Kenneth M., "Computer Simulation of Therapy of Neurotic Process"

Killam, Keith F., Jr., "Quantification of Neuroelectric Signals"

Lederberg, Joshua, "Linc Computer Evaluation"

Suppes, Patrick, "Computing and Programming in Mathematical Psychology"

von der-Groeben, Jobst, "Tempero-spatial Computer Analysis of ECG Waves"

COLORADO

University of Colorado Medical Center, Denver

Perez-Tamayo, Ruheri, "Analysis of Isodose Distributions by Digital Methods"

CONNECTICUT

Yale University, New Haven

Henderson, Virginia A., "Research Index for Periodical
Publication"

Raisig, L. Miles, "Interview Analysis of Research Use of
Medical Books"

DISTRICT OF COLUMBIA

American Chemical Society, Washington

Dyson, George M., "Restricted Express Lists, Pharmacological
Activity"

Georgetown University, Washington

Marchetti, Andrew A., "Application of Correlation Analysis to
Fetal ECG"

Pipberger, Hubert V., "Digital Coding of Clinical Cardio-
vascular Information"

FLORIDA

University of Miami, Coral Gables

Clyde, Dean J., "Predictors and Criteria in Psychopharma-
cology"

Communication Research Institute of St. Thomas, Miami

Lilly, John C., "Linc Computer Evaluation"

GEORGIA

Southern Regional Education Board, Atlanta

Williams, Harry B., "Development and Use of Mental
      Health Statistics"

ILLINOIS

University of Chicago, Chicago

Potts, Albert M., "Information Retrieval in the Visual
      Sciences"

Rashevsky, N., "The Application of Topology to General
      Biology"

Skaggs, Lester S., "Analog Computer for Research in
      Biology and Medicine"

University of Illinois, Chicago

Miller, George E., "Study of Automatic Teaching in
      Medical Education"

Northwestern University, Evanston

Grodins, Fred S., "Linc Computer Evaluation"

Lewis, F. John, "Automatic Patient Monitoring During
      General Anesthesia"

Quon, Jimmie E., "Mathematical Simulation of Refuse
      Collection and Disposal Systems"

University of Illinois, Urbana

Von Foerster, Heinz, "Principles of Information Transfer
      in Living Systems"

INDIANA

Indiana University Foundation, Bloomington

Shumate, Robert P., "The Simulation of Traffic Flow on a
Digital Computer"

KANSAS

Kansas State University of Agriculture and Applied Science, Manhattan

Overall, John, "Quantitative Approaches to Diagnosis"

LOUISIANA

Tulane University, New Orleans

Balintfy, Joseph L., "Experiments with Computerized
Diagnostic Processes"

Schenhal, Joseph E., "A System for Computer Processing
of Medical Records"

Sweeney, James W., "An Integrated Biomedical Computing
System"

MARYLAND

John Hopkins Hospital, Baltimore

Flagle, Charles D., "Optimal Organization and Facility for
a Nursing Unit"

"Operations Research in the Health Services"

John Hopkins University, Baltimore

Mark, Henry J., "Problem Solving Behavior in Man"

Mountcastle, Vernon B., "Linc Computer Evaluation"

Shepard, Richard H., "A Computing Center - Johns Hopkins
Medical Institutions"

Talbot, Samuel A., "Biomedical Engineering Research
Program"

"Blood Flow in Nonhomogeneous and Nonlinear Vessels"

Webb, George N., "Data Reduction and Correlation of Cardiac
Signals"

Weiss, Bernard, "Linc Computer Evaluation"

Federation of American Societies for Experimental Biology, Bethesda

Lee, Milton O., "Evaluation Study - Federation of American
Societies for Experimental Biology Information
Processing Center"

Institute for Advancement of Medical Communication, Bethesda

Orr, Richard H., "Metabolism of Biomedical Information"

National Biomedical Research Foundation, Inc., Silver Spring

Dayhoff, Margaret O., "Aids to Interpretation of Protein
Crystallography"

"Sequences of Amino Acids in Proteins by Computer
Aids"

Ledley, Robert S., "Obturator and Prostheses Stability Through
Dental Force Analyses"

"Mathematical and Implemental Aids to Medical
Diagnosis"

Ledley, Robert S., "Analysis of Chromosome Karyograms"

"Biomedical Picture Data Processor"

"Photomicrographic Analysis of Central Nervous System"

MASSACHUSETTS

Massachusetts General Hospital, Boston

Adams, Raymond D., "Punch Card Research Facility for
    Neurological Data"

Barlow, John S., "Computer Studies of Brain Potentials in Man"

Brownell, Gordon L., "Computer Applications in Biological
    Research

Massachusetts Mental Health Research Corporation, Boston

Geller, Miriam R., "Bibliographic Research in Psycho-
    pharmacology"

Harvard University, Cambridge

Bartholomay, Anthony F., "Development of a Research Center
    in Biomathematics"

Huttenlocher, Janellen, "Factors Affecting Inductive Reasoning"

Thomas, Harold A., Jr., "Operations Research in Water
    Quality Management"

Massachusetts Institute of Technology, Cambridge

Barnett, Michael P., "Mathematical Linguistics and Computer
    Techniques"

Rosenblith, Walter A., "Center for Computer Technology in
    Biomedical Sciences

Zimmerman, Henry J., "Basic Research in Communication
    Sciences"

Rockford Research Institute, Inc., Cambridge

Fergusson, E. Stuart, "Reactive Typewriter Development for Medical Research"

Solomonoff, R. J., "Theory of Predictive Data Patterns"

Individual Grant, Cambridge

Textor, Robert B., "Computer Method forDelineating Culture Patterns"

Clark University, Worcester

Stubbe, John S., "Clark University Computer Center"

MICHIGAN

Commission on Professional and Hospital Activities, Inc., Ann Arbor

Kincaid, William H., "Computer Analysis of Medical Classifications"

University of Michigan, Ann Arbor

Coombs, Clyde H., "Risk-taking Behavior in Decision Making"

Gyr, John W., "Computer Simulation of a Class of Cognitive Theories"

Hess, Irene, "Probability Sampling Methods in Statistical Analysis"

Uhr, Leonard M., "Computer Simulations of Higher Mental Processes"

Ypsilanti State Hospital, Ypsilanti

Mattsson, Nils B., "Effects of Missing Data in Statistical Analysis"

MINNESOTA

University of Minnesota, Minneapolis

Schmitt, Otto H., "Analysis of Time Coherent Cardiovascular Data"

Mayo Association, Rochester

Bickford, Reginald G., "Automatic Pattern Recognition in the Electroencephalogram"

"Automatic Pattern Recognition in the Electro-encephalogram"

Rome, Howard P., "Automation Techniques in Personality Assessment"

Wood, Earl H., "Mathematical Analysis of Indicator-Dilution Techniques"

MISSOURI

University of Missouri, Columbia

Daniel, Robert S., "Electronic Data Processing of EEG Patterns"

Lodwick, Gwilym S., "Computer Analysis of Tumor Roentgenograms"

Midwest Research Institute, Kansas City

Levy, Sheldon L., "Study of Traffic Phenomena Through Digital Simulation"

Central Institute for the Deaf, St. Louis

Cox, Jerome R., Jr., "A Data-processing Computer for Bioelectric Signals"

Washington University, St. Louis

O'Leary, James L., Linc Computer Evaluation"

Stern, John A., "Cross Correlational Techniques in Psychiatric
Diagnosis"

MONTANA

Holter Research Foundation, Inc., Helena

Holter, Norman J., "Cardiac Studies with Continuous ECG
Monitors"

NEBRASKA

University of Nebraska, Lincoln

Wilson, Kellogg V., "Two-person Mixed Motive Situations"

NEW MEXICO

New Mexico Highland University, Las Vegas

McConnon, Myles, "Small Computer Installation for Biophysical
Research"

New Mexico School for the Deaf, Santa Fe

McCandless, Geary A., "Assessment of Hearing in Man Using
an Auto Correlator"

NEW YORK

Maimonides Hospital of Brooklyn, Brooklyn

Kantrowitz, Adrian, "Integrated Electronic Control of
Physiologic Systems"

165

State University of New York, Buffalo

Ewell, Raymond, "Support of Computing Center"

Hoffman, Joseph G., "Monte Carlo Computations of Cell
    Growth"

Rochester Conference Committee, 1963, East Rochester

Enslein, Kurt, "Partial Support of 1963 Rochester Conference"

Columbia University, New York City

Fertig, John W., "Statistical Methods in Dental Research"

    "Statistical Methods in Dental Research"

Institute for Bio-Medical Computer Research, New York City

Gottsch, Lida G., "Publication of Medical Computer Code Forms"

Masonic Foundation for Medical Research and Human
Welfare, New York City

Moe, Gordon K., "A Computer Model of Cardiac Arrhythmias"

Memorial Hospital for Cancer and Allied Diseases,
New York City

Laughlin, John S., "Medical Computer Facility"

Memorial Sloan Kettering Cancer Center, New York City

Murphy, Terence W., "Computer Studies of Respiration"

New York Botanical Garden, New York City

Rogers, David J., "Use of Computers in Classification"

New York University, New York City

Cady, Lee D., Jr., "Numerical Analysis of Electrocardiogram"

"Numerical Analysis of Electrocardiogram"

"Correlations of Electrocardiographic Characteristics"

"Biomedical Computing Section"

Cohen, Jacob, "Statistical Power of Psychological Research"

Mehr, Emanuel, "Computer Interpretation of Dye Dump Studies"

Woodbury, Max A., "Electronic Data Processing in Hematology"

"Electronic Data Processing in Hematology"

"Histochemistry of Pulpal Response to Operative Stress"

"Biomedical Computing Section"

New York University Medical Center, New York City

Mainland, Donald, "Promotion of Biometrical Methods in Medical Research"

Yeshiva University, New York City

Macy, Josiah, Jr., "Physiological Data Processing and Analysis Facility"

University of Rochester, Rochester

John, Erwin R., "Development of Methods of Data Analysis and Reduction"

NORTH CAROLINA

University of North Carolina, Chapel Hill

Hall, William J., "Sequential Experimentation and Analysis"

167

Stacy, Ralph W., "Digital Processing of Physiological Data"

Duke University, Durham

Boneau, Charles A., "Linc Computer Evaluation"

Long, Ernest C., "General Purpose Analog Digital Conversion
    Facility"

North Carolina State College of Agriculture and Engineering,
Raleigh

Cockerham, C. Clark, "The Statistics of Genetic Systems"

Monroe, Robert J., "Statistical Properties of Non-linear
    Estimators"

Bowman Gray School of Medicine - Wake Forest College,
Winston-Salem

Malindzak, George S., Jr., "Line Computer Evaluation"

Wake Forest College, Winston-Salem

Carpenter, Harry M., "A Data System for Laboratory
    Medicine"

OHIO

University of Cincinnati, Cincinnati

Franke, Ernest K., "Power Spectrum Analysis of the High
    Frequency ECG"

Sterling, Theodore D., "Optimizing Automated Radiation
    Treatment Planning"

University of Cincinnati College of Medicine, Cincinnati

Sterling, Theodore D., "Expansion of Biomedical Computing
    Center"

Case Institute of Technology, Cleveland

Plonsey, Robert, "Mathematical and Computer Analysis
    In Medical Systems!"

Highland View Hospital, Cleveland

Houser, Harold B., "Application of Computer to Analysis of
    Dietary Intake"

Western Reserve University, Cleveland

Kent, Allen, "Documentation of Communicable Disease
    Literature"

Ohio State University Research Foundation, Columbus

Pasamanick, Benjamin, "Statistical Classification of Mental
    Disorders"

"Statistical Classification of Mental Disorders"

"Electronic Computer Programming in Psychiatric
    Research"

Psychiatric Research Foundation of Columbus, Columbus

Pasamanick, Benjamin, "Electronic Computer Programming
    in Psychiatric Research"

Fels Research Institute, Yellow Springs

Sontag, Lester W., "Computer Facility"

OKLAHOMA

University of Oklahoma, Oklahoma City

Bayley, R. H., "Electronic Computation of Areas of ECG
    Deflections"

Schottstaedt, William., "Establishment of a Medical Research
    Computer Center"

169

OREGON

Oregon State University, Corvallis

Stahl, Walter R., "Simulation Techniques in Mathematical Biology"

Oregon Research Institute, Eugene

La Forge, Rolfe, "Sequential Diagnosis - I. Exploratory Models"

University of Oregon, Eugene

Hill, Terrell L., "Applications of Statistical Thermodynamics in Biology"

PENNSYLVANIA

Lafayette College, Easton

Cohen, Burton H., "Verbal Information Processing"

University of Pennsylvania, Philadelphia

Chu, John T., "Order Statistics and Rules for Ranking Distributions"

Garfinkel, David, "Medical School Computer Facility"

Whitney, Vincent H., "Demographic Programming"

Presbyterian Hospital in Philadelphia, Philadelphia

Attinger, Ernst O., "Linc Computer Evaluation"

Carnegie Institute of Technology, Pittsburgh

Bugliarello, George, "A Synthetic Computer Language for Sanitary Engineering"

170

Simon, Herbert A., "Research on Information Processing Psychology"

University of Pittsburgh, Pittsburgh

Jeffrey, George A., "Programming for Biochemical Structure Determination"

Institute for Research, Inc., State College

Radlow, Robert, "Decision-making Theory for Multiperson Interactions"

RHODE ISLAND

Brown University, Providence

Burnight, Robert G., "Computer Utilization in Population and Health Studies"

Kingsland, L. C. Jr., "Program in Medical Information Handling"

SOUTH CAROLINA

South Carolina State Mental Health Commission, Columbia

Reeves, P. G., Jr., "Mental Health Data Collector Service"

TENNESSEE

Clover Bottom Hospital and School, Donelson

Denniston, Joseph C., "Study of Programming for Training the Blind Retarded"

University of Tennessee, Memphis

Sheppard, Charles W., "Medical Computer Project"

Vanderbilt University, Nashville

Schumann, Fred, "Frequency Domain Techniques for Pulse
    Height Analysis"

TEXAS

University of Texas, Austin

Peck, Robert F., "Computer Analysis of Personality"

University of Texas, Dallas

Bonte, Frederick J., "Processing of Blood Pool Scan Data"

University of Texas, M. D. Anderson Hospital and Tumor
Institute, Houston

Mountain, Clifton F., "Biomathematics in a Cancer Research
    Institute"

University of Texas, Postgraduate School of Medicine,
Houston

Taylor, Grant, "A Biomathematical Computational Center"

UTAH

Dr. William H. Groves Latter-Day Saints Hospital, Salt
Lake City

Warner, Homer R., "Regulating Cardiac Stroke Volume with
    Analog Computer"

University of Utah, Salt Lake City

Warner, Homer R., Expansion of Computer Facility"

VERMONT

University of Vermont, Burlington

Eldred, Donald M., "Use of Programmed Instruction with
    Disturbed Students"

VIRGINIA

Medical College of Virginia, Richmond

Ham, William T., Jr., "Expansion of Computation Laboratory"

WASHINGTON

University of Washington, Seattle

Bruce, Robert A., "Computer Diagnosis of Cardiovascular
    Disease"

Scher, Allen M., "Computer Analysis of ECG and Blood
    Pressure Control"

Woodbury, J. Walter, "Linc Computer Evaluation"

WISCONSIN

University of Wisconsin, Madison

Hind, Joseph E., Jr., "Linc Computer Evaluation

Contrails

Security Classification

DOCUMENT CONTROL DATA - R&D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY *(Corporate author)*	2a. REPORT SECURITY CLASSIFICATION
IBM Corporation, Thomas J. Watson Research Center, PO Box 218, Yorktown Heights, New York	UNCLASSIFIED
	2b. GROUP N/A

3. REPORT TITLE

SURVEY OF LIFE SCIENCES COMPUTER PROGRAMS

4. DESCRIPTIVE NOTES *(Type of report and inclusive dates)*

Final Report 15 July 1963 - 14 July 1964

5. AUTHOR(S) *(Last name, first name, initial)*

Hammidi, Ibrahim B., Dresher, Lilliam , Wade, Carol S.

6. REPORT DATE	7a. TOTAL NO. OF PAGES	7b. NO. OF REFS
November 1965	173	

8a. CONTRACT OR GRANT NO. AF 33(657)-11347	9a. ORIGINATOR'S REPORT NUMBER(S)
b. PROJECT NO. 7233	AMRL-TR-65-113
c. Task No. 723305	9b. OTHER REPORT NO(S) *(Any other numbers that may be assigned this report)*
d.	

10. AVAILABILITY/LIMITATION NOTICES

Distribution of this document is unlimited.

11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY
	Aerospace Medical Research Laboratories Aerospace Medical Division, Air Force Systems Command, Wright-Patterson AFB, Ohio

13. ABSTRACT

A need exists for dissemination of information on the uses of computers in the life sciences. This report attempts to provide the information necessary to locate and request programs or program descriptions and listings. Typical applications in the life sciences are described for general programs on information retrieval, cross-tabulation of data, tests of statistical hypotheses, regression analysis, multivariate analysis, time series analysis, analysis of variance and covariance, mathematical diagnosis, linear programming, simulation, numerical techniques, and matrix algebra. In addition to these general purpose programs, many special purpose programs exist which are applicable within the gamut of research problems. Some specific examples are finding interatomic distances and angles, blood volume analysis, cardiac arrythmia analysis, etc. The Key-word-in-Context (KWIC) – Index of life sciences computer programs consisting of 1) the Key-Word Index, 2) Author Index, and 3) Code-Name Index is given in the final section of the report.

DD FORM 1473
1 JAN 64

14.		LINK A		LINK B		LINK C	
KEY WORDS		ROLE	WT	ROLE	WT	ROLE	WT
Computer Programs Medical Applications of Computers Computers in Life Sciences							

INSTRUCTIONS

1. ORIGINATING ACTIVITY: Enter the name and address of the contractor, subcontractor, grantee, Department of Defense activity or other organization (*corporate author*) issuing the report.

2a. REPORT SECURITY CLASSIFICATION: Enter the overall security classification of the report. Indicate whether "Restricted Data" is included. Marking is to be in accordance with appropriate security regulations.

2b. GROUP: Automatic downgrading is specified in DoD Directive 5200.10 and Armed Forces Industrial Manual. Enter the group number. Also, when applicable, show that optional markings have been used for Group 3 and Group 4 as authorized.

3. REPORT TITLE: Enter the complete report title in all capital letters. Titles in all cases should be unclassified. If a meaningful title cannot be selected without classification, show title classification in all capitals in parenthesis immediately following the title.

4. DESCRIPTIVE NOTES: If appropriate, enter the type of report, e.g., interim, progress, summary, annual, or final. Give the inclusive dates when a specific reporting period is covered.

5. AUTHOR(S): Enter the name(s) of author(s) as shown on or in the report. Enter last name, first name, middle initial. If military, show rank and branch of service. The name of the principal author is an absolute minimum requirement.

6. REPORT DATE: Enter the date of the report as day, month, year; or month, year. If more than one date appears on the report, use date of publication.

7a. TOTAL NUMBER OF PAGES: The total page count should follow normal pagination procedures, i.e., enter the number of pages containing information.

7b. NUMBER OF REFERENCES: Enter the total number of references cited in the report.

8a. CONTRACT OR GRANT NUMBER: If appropriate, enter the applicable number of the contract or grant under which the report was written.

8b, 8c, & 8d. PROJECT NUMBER: Enter the appropriate military department identification, such as project number, subproject number, system numbers, task number, etc.

9a. ORIGINATOR'S REPORT NUMBER(S): Enter the official report number by which the document will be identified and controlled by the originating activity. This number must be unique to this report.

9b. OTHER REPORT NUMBER(S): If the report has been assigned any other report numbers (*either by the originator or by the sponsor*), also enter this number(s).

10. AVAILABILITY/LIMITATION NOTICES: Enter any limitations on further dissemination of the report, other than those imposed by security classification, using standard statements such as:

(1) "Qualified requesters may obtain copies of this report from DDC."

(2) "Foreign announcement and dissemination of this report by DDC is not authorized."

(3) "U. S. Government agencies may obtain copies of this report directly from DDC. Other qualified DDC users shall request through

_____."

(4) "U. S. military agencies may obtain copies of this report directly from DDC. Other qualified users shall request through

_____."

(5) "All distribution of this report is controlled. Qualified DDC users shall request through

_____."

If the report has been furnished to the Office of Technical Services, Department of Commerce, for sale to the public, indicate this fact and enter the price, if known.

11. SUPPLEMENTARY NOTES: Use for additional explanatory notes.

12. SPONSORING MILITARY ACTIVITY: Enter the name of the departmental project office or laboratory sponsoring (*paying for*) the research and development. Include address.

13. ABSTRACT: Enter an abstract giving a brief and factual summary of the document indicative of the report, even though it may also appear elsewhere in the body of the technical report. If additional space is required, a continuation sheet shall be attached.

It is highly desirable that the abstract of classified reports be unclassified. Each paragraph of the abstract shall end with an indication of the military security classification of the information in the paragraph, represented as (TS), (S), (C), or (U).

There is no limitation on the length of the abstract. However, the suggested length is from 150 to 225 words.

14. KEY WORDS: Key words are technically meaningful terms or short phrases that characterize a report and may be used as index entries for cataloging the report. Key words must be selected so that no security classification is required. Identifiers, such as equipment model designation, trade name, military project code name, geographic location, may be used as key words but will be followed by an indication of technical context. The assignment of links, rules, and weights is optional.