ED 310 772 IR 052 836

AUTHOR Sullivan, Kathryn
TITLE Using UTAH PILOT To Teach Basic DIALOG Searching.
PUB DATE 88
NOTE 56p.
PUB TYPE Guides - Classroom Use - Materials (For Learner) (051) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Authoring Aids (Programing); Bibliographic Databases; *Computer Assisted Instruction; Computer Simulation; Higher Education; *Instructional Design; Learning Modules; Microcomputers; Nursing Education; Online Systems; Programing Languages; *Search Strategies; Users (Information)
IDENTIFIERS DIALOG; ERIC; Utah Pilot; Winona State University MN

ABSTRACT

The popularity of DIALOG database searching causes problems when requestors do not understand how the service operates or how to fill out a search request. This report describes the implementation of a computer-aided instructional (CAI) program, which was developed using the UTAH PILOT programming language, to convey basic information about DIALOG to students in the College of Nursing and Health Sciences at Winona State University. The program was designed to demonstrate how to do simple DIALOG searches in ERIC and biomedical databases on 5.25 or 3.5 inch disks in the computer laboratory. The CAI program was divided into three parts: (1) an introduction to DIALOG and the basic commands; (2) a brief review and a quiz; and (3) examples of an actual search in DIALOG. The CAI simulation was designed to allow students to learn about DIALOG services while fostering an appreciation of why some searches do not provide the desired results. It is noted that, although no students who had completed the CAI program had availed themselves of the opportunity to conduct an online search under librarian supervision, a definite improvement had been observed in both the number and the quality of the online search requests submitted from the College of Nursing. The report includes background information about DIALOG; a brief literature review; and discussions of the implementation of the program, pilot testing results and subsequent changes in the program, and the outcome of the project. The appendixes, which make up the greater part of the report, provide two examples from the CAI program and a copy of the complete instructional program. (12 references) (SD)

USING UTAH PILOT TO TEACH BASIC DIALOG SEARCHING

Kathryn Sullivan
Winona State University
Winona, MN 55987
(507) 457-5150

An earlier version of this paper
was presented as a practicum
for the Computer-Based Learning
Program at Nova University,
Fort Lauderdale, FL

January 1989

ABSTRACT

The popularity of DIALOG database searching causes problems when requestors do not understand how the service operates or how to fill out a search request. A CAI program using PILOT authoring language to demonstrate basic searches in DIALOG is outlined for use in academic departments where online or CD-ROM demonstrations are not available.

INTRODUCTION

DIALOG has become an increasingly popular reference tool in many areas; libraries, hospitals, and businesses all benefit in many ways from its existence. Serious searchers can obtain access from their home micro-computers (Tenopir, 1983); public libraries use DIALOG as part of their reference service (Golomb and Reisman, 1984); and even high school students learn DIALOG searching as part of their basic library skills (Tenopir, 1986).

Not only are the databases offered by DIALOG valuable to a researcher, but the educational discount programs appeal to the money-conscious as well (Tenopir, 1986).

With all these examples of DIALOG's popularity, it should follow that most universities using DIALOG would show a heavy usage. However, such is not the case. Not only must the need for the service and the money to support it exist, but so, too, must the staff.

BACKGROUND

Historical

In November 1985, Maxwell Library of Winona State University began subscribing to DIALOG Information Services. The Government Documents librarian was assigned the responsibility of searching DIALOG along with the regular duties in her area. Only two other librarians were trained as backup.

The demand for DIALOG searches grew slowly, since the service initially was offered only to faculty and graduate students (by 1987, seniors and juniors were allowed to search). But the availability of the service was well-publicized, and word-of-mouth brought in more students with search requests.

Then, in March 1987, the Government Documents/DIALOG Librarian left WSU, and the job of searching DIALOG fell to the Curriculum Librarian (one of the two backups) as her area was near Government Documents. (The terminal was later moved further from both areas, into Cataloging Department.) DIALOG searching was done only when the Curriculum Librarian could spare time from her other duties, and the availability of the service was only known by word-of-mouth.

Current

Three academic departments at Winona State University expressed great interest in the DIALOG service long before

Maxwell Library obtained a modem. The College of Nursing and Health Sciences currently has 400 majors attending classes at both the main campus and the WSU Rochester Center in Rochester, MN (about a 45 minute drive from main campus). In the College of Education, the Educational Administration department has 313 undergraduate majors and 56 students studying for the specialist degree or certificate. The Special Education department is attempting to institute a major and currently has 160 undergraduate minors at both the main and the regional campus and 12 students studying for specialist degrees. Both the Special Education department and Educational Administration department rely heavily on ERIC and their students spend a great deal of time doing manual searches of the ERIC indexes.

All three departments have expressed an interest in the possibility of their students doing their own online DIALOG searching. Numerous complaints have been made by nursing students to the effect that they signed up for a particular class under the assumption that they would be doing online searching themselves, rather than filling out requests for searches to be done.

The search requests that are filled out are often lacking important information such as subject terms. This means the DIALOG librarian must then contact the patron for further information or attempt a search with terms which might not be what the requestor had in mind.

A recent innovation was to allow the student to sit by while the librarian conducted the search. Students were then able to broaden or narrow the searches, resulting in more successful searching. But, given the number of students in the programs, one-to-one instruction of this kind will take more time than the DIALOG librarian can spare from her other duties.

COMPUTER ASSISTED INSTRUCTION

One possible solution to this dilemma would be a way of instructing a would-be searcher on how to fill out the DIALOG search requests so that they will obtain exactly what they want. The students in these programs range from students familiar with search strategies through usage of Maxwell Library's PAIS online catalog for the book collection to nontraditional students unfamiliar with the idea of computer databases. The request forms are already very simple, yet often all that is filled in is the requestor's name and a simple statement of the search request. Since simple directions on the form itself have not proved effective, perhaps what the would-be requestor needs is not directions, but instead a basic understanding of DIALOG and how the service operates so as to better phrase the requests.

Although there are numerous guides to DIALOG searching available (Elia, 1984; Kesselman, 1987), many presuppose two important details: that the library has many modem-linked terminals available for public use, and that the library has

the funds to purchase the additional service. Maxwell Library has neither. An additional difficulty is in the arrangement of the main and regional campuses. Materials available at one campus are often lacking at the other. The WSU Rochester Center, which once had a small library of journals and indexes (including a few volumes of RESOURCES IN EDUCATION), is now at the Rochester Community College, and the Special Education department must borrow volumes of RESOURCES IN EDUCATION from Maxwell Library to take to Rochester to demonstrate manual searches of the index. The Community College Library offers DIALOG service, but only to community college students.

One resource available at both campuses is a computer lab. A computer assisted instruction program, using the PILOT programming language (specifically UTAH PILOT for DOS-PCs), seemed the best way of conveying basic information about DIALOG in a manner that permitted the student at the same time to get a limited understanding of how DIALOG worked.

Because the Special Education and the Educational Administration departments and the College of Nursing and Health Sciences were the heaviest users, the PILOT program was designed to demonstrate to those patrons how to do simple DIALOG searches in the ERIC and some of the medical databases. With both ERIC and the biomedical databases on one disk, the user had more options with which to experiment.

A further deal was worked out with the DIALOG/Curriculum Librarian to allow those students who went through the CAI

simulation the opportunity to attempt a DIALOG search by themselves under librarian supervision.

LITERATURE REVIEW

Although there are many studies and reports written about the value of DIALOG and the varied groups using that service, the amount of articles written about PILOT language is still small. The majority of articles are about SuperPILOT for the Apple II computer; but even those have valuable information about the PILOT language in general. Good examples are Rosenfeld (1987), Collins (1985) and Hosie (1984). Richardson (1984) had an analysis (with recommendation) of IBM PILOT.

Although my original decision to use PILOT as the authoring language for this program was based on my own encounter with that language in Nova University's Systems Analysis, Expert Systems and Artificial Intelligence class, the fact that articles I have found written about PILOT have raved about its ease of use removed any lingering doubt that another language might have proved a better choice.

None of the articles found discussed teaching DIALOG searching by computer-assisted instruction (CAI). The usual manner of teaching DIALOG search techniques seems to be actual hands-on experience in one of the cheaper databases (Elia, 1984 and Tenopir, 1986). DIALOG is now offering a Classroom Instruction Program (Kesselman, 1987) with workbooks

and guides for elementary and high school students, but university students have no such option.

IMPLEMENTATION

The March 1985 issue of DIALOG BASICS was used as a starting point in developing a brief list of basic commands that a user needs to know in order to use DIALOG. The DIALOG Bluesheets provided additional ideas. Based on my own experience with DIALOG as a backup searcher for the service, I decided not to overwhelm the CAI program by instructing the user in the various ways of searching DIALOG by descriptor, author, etc. Free-text searching has always produced the fastest results, as DIALOG searches all fields of the records. Other searchers have had similar experiences (Roose, 1986).

In order to give the user the best possible idea of what DIALOG is and how the searches work, the program was divided into three parts: an introduction to DIALOG and the basic commands, a brief review and quiz (which the user can elect to skip) and examples of an actual search in DIALOG which I had done.

The search part of the program allows searching with preset terms, combining sets and the displaying of the results. The user starts off in ERIC, since DIALOG logs in in that database, and nursing students have the option of switching from there to the biomedical databases. If the user stays in

the ERIC database, the program gives the option of two searches (and displays). The user then has the choice to either end the program or go on into the biomedical databases for further experimentation.

The first biomedical database encountered was File 218, CINAHL. Using the preselected terms, the user could do one search and display, and then could continue on into File 154, MEDLINE. At this point--although it isn't noticed if the user follows directions--the option is also present to stop the program.

Once in MEDLINE, the program briefly instructs the user how to limit a search by language (since MEDLINE is an international index) and then allows the user to do a search and display the results. If the user limits the search to English records, two English records are displayed. If the user forgets to limit the search, one English record and one Japanese record are displayed. The user can then either go back into ERIC, (File 1) or stop the program.

At each stop option, the program briefly mentioned how the user could set up an appointment to actually search DIALOG and then, to reinforce the fact that online time is expensive, showed the online charges accumulated at that particular point.

ANALYSIS

Setting up the first two parts of the CAI program--the basic introduction and review--was relatively easy in the PILOT

language. The next step, inputting the actual searches, raised a few problems. The main advantage of PILOT is the Match command (Rosenfeld, 1987), but the disadvantage is that PILOT can either be very forgiving in accepting matches or very exact. A more serious disadvantage is that all the possible matches can only be input on a single line. However, alternating M and JM statements allows for more matches. Using '*' to abbreviate the match terms also helps to expand possible matches (see examples), but '*' also allows matches of mistyped words. Since the main idea behind the program was to set up as many possible correct matches as a student might be counted on to use, in an attempt to more realistically demonstrate DIALOG, the probability of a mistyped word giving the wrong impression of how DIALOG would actually respond had to be given a low priority. A line had to be drawn at some point on possible matches, obviously, since people vary widely in search approaches, but there was one search strategy that had to be discouraged. Users familiar with WSU's PALS (Project on Automated Library Systems) online catalog have grown accustomed to leaving out the AND connector when doing term searches. This is fine when PALS is used, since that system automatically adds the AND connector, but DIALOG does not, and DIALOG's response is an empty set. An additional match statement allowed a demonstration of that response.

After studying the results of faculty testing of the CAI program, I decided to make the program a little more user-friendly in the first databases attempted. Common problems reported by faculty usually demonstrated that the directions were either ignored or not understood. Two users forgot that they were not actually in DIALOG and attempted to use more sophisticated commands that were not discussed by the program. Because the departments that received the DIALOG program for use by their students had varying ideas of how and where they would keep the disk, the only directions provided with the disk instructed the student on how to load the PILOT DIALOG disk and what to do if they wanted to stop the program at any time (i.e., remove the disk from the computer). These directions were taped to the disk envelope. The list of DIALOG commands was only given within the program and, unless a student kept notes, these could be forgotten when the program went to the searching section. Therefore, a subroutine was inserted that allowed the user to make two mistakes in the ERIC and CINAHL databases (two mistakes appeared to be the limit of frustration in pretests of the program). On the second mistake, the program took over and led the user step by step through the preset DIALOG search, with an explanation provided for each step.

The addition of the subroutine was possible by combining the C (Calculate) and J (Jump) commands. A counter (q) was set at zero when the database subroutine began, and increased by one

each time a mistake was made. Placing the J(q) command before the calculation C:q=q+1 allowed the possibility of two mistakes to be made since once q was larger than zero the J command moved the program into the reinforced direction subroutine.

RESULTS

To date, no survivor of the CAI program has appeared for a DIALOG search. However, a study of the DIALOG search request forms that have been submitted from nursing faculty and students over the years demonstrated that not only has the amount of searches requested increased 62% over the previous year, but the search strategies have been increasingly better thought-out. Where once a request contained merely a descriptive sentence of what was needed or a list of often overlapping "descriptors" (few of which actually had appeared in the indexes), now a request has distinct keywords that usually quickly produces the desired result. The change is dramatic. Only 25% of the requests from the 1987-88 school year had keywords. The requests for the 1988-89 school year (when the PILOT DIALOG program was made available) thus far has had keywords in every request submitted by nursing students. So the DIALOG program has aided searching in this unforeseen way.

CONCLUSION

The planned result of developing this CAI program was that those departments desirous of having their students do their own

DIALOG searches would be provided with the computer assisted instruction program on their choice of 5 1/4 or 3 1/2 disk. Once a student learns how to do basic DIALOG searches, he or she can then set up an appointment with the DIALOG services librarian to conduct a search under her supervision. This will give the student actual hands-on experience and remove some of the mystery that presently surrounds the service. DIALOG should not be viewed as "an exotic gourmet treat designed just for special people with special problems" (Quint, 1988) but as one of many services that a library offers. The CAI program will allow more students to learn about DIALOG service and will do so in a manner that also fosters understanding of why some searches don't always provide the results they would wish.

BIBLIOGRAPHY

Collins, Michael A.J. "PILOT--A Biologist's View of an Authoring Language." AMERICAN BIOLOGY TEACHER, 47: 493-495. November/December, 1985.

DIALOG BASICS: A Brief Introductory Guide to Searching. Palo Alto, CA: DIALOG Information Services, March 1985.

Elia, Joseph J., Jr. "In-Search." POPULAR COMPUTING, 4:149-152. November, 1984.

Golomb, Katherine A., and Sydelle S. Reisman. "Using DIALOG for Ready Reference." LIBRARY JOURNAL, 109:786-788. April 15, 1984.

Hosie, Thomas W., and Charles W. Smith. "PILOTing Courseware." COUNSELOR EDUCATION AND SUPERVISION, 24:176-185. December, 1984.

Kesselman, Martin. "Online Update." WILSON LIBRARY BULLETIN. 61:53-54. June, 1987.

Quint, Barbara. "Connect Time." WILSON LIBRARY BULLETIN, 62: 68-69. May, 1988.

Richardson, W. Kirk. "IBM PILOT Authoring Language and the CAL Course." SCIENCE SOFTWARE QUARTERLY, 1:7-15. Fall, 1984.

Roose, Tina. "Free-Text Searching Is Easier." LIBRARY JOURNAL, 111:136-137. February 15, 1986.

Rosenfeld, Barbara. "Can PILOT Help Educators?" JOURNAL OF COMPUTERS IN MATHEMATICS AND SCIENCE TEACHING, 6:37-39. Summer, 1987.

Tenopir, Carol. "Dialog's Knowledge Index and BRS/After Dark: Database Searching On Personal Computers." LIBRARY JOURNAL, 108:471-474. March 1, 1983.

Tenopir, Carol. "Online Searching in Schools." LIBRARY JOURNAL, 111:60-61. February 1, 1986.

APPENDIX 1

EXAMPLE ONE

MATCH STATEMENTS ALLOWING ONLY EXACT MATCHES

```
TH:  Enter your answer:
AS:$S$
M:a,b,c
JM:*answer1,*answer2,*answer3
JN:*typo1
R:ALLOWANCE FOR TYPOS
*typo1
T:Please enter only a, b, or c


M:SS COMPUTER()ASSISTED()INSTRUCTION,SS SEVERE()DISABILITIES
JM:*hit1,*hit2
JN:*miss1
```

EXAMPLE TWO

MATCH STATEMENTS THAT PERMIT TYPOS

```
M:SS C*R()AS*D()I*N,SS S*E()D*S,SS S*E AND D*S,SS C*R AND A*D AND I*N
JM:*hit1,hit2,*hit4,*hit3
M:SS C*R AS*D I*N,SS S*E D*S
JM:*mistake1,*mistake2
JN:*miss1
```

APPENDIX 2

PILOT DIALOG PROGRAM

```
R: Basic DIALOG Searching
R: by Kathryn Sullivan, Winona State University, May 1988
R: title page
T:
 :
 :
CH:
CA:10,25
T:B A S I C     D I A L O G
CA:12,29
T:S E A R C H I N G
FOOT:
CH:
CA:5,5
T: DIALOG is a collection of over 200 databases
 :    containing 100 million records online.  The
 :    citations come from over 60,000 journals and
 :    reports.
 :
 :     The databases cover a wide range of areas from
 :    business, to philosophy, to education to news,
 :    general science, psychology and biomedicine.
 :
TH:       Press "return" to continue
A:
CA:14
CL:
CA:14,5
T: This program will demonstrate basic commands
 :    used in searching most of the databases.
 :    More technical commands are listed on the
 :    Bluesheets, in THE GUIDE TO DIALOG SEARCHING,
 :    which detail the coverage of each database.
FOOT:
CH:
CA:3,5
T:   The first, and most important, step in searching
 :    the DIALOG databases takes place before you ever
 :    sit down before a terminal.
 :
 :    ----------------------------------------
 :    |                                      |
 :    |      choose possible subject terms   |
 :    |                                      |
 :    ----------------------------------------
```

```
  :
  :     Then, check those terms against the actual
  :     subject headings used in the indexes:
  :     RESOURCES IN EDUCATION, for ERIC; INDEX MEDICUS,
  :     for Medline; and so on.
FOOT:
CH:
CA:4,5
T: Because online searches are expensive, the
  :     next important step is to
  :
  :     ------------------------------------------
  :     |                                        |
  :     |          plan your search terms        |
  :     |                                        |
  :     ------------------------------------------
  :
  :
  :      Records are retrieved from the database by
  :      entering the SELECT SET command (SS) followed
  :      by your search terms.
  :
  :           SS EDUCATION
FOOT:
CH:
CA:3,5
T: To tell the computer that your subject term
  :      may have several different endings, use a
  :      question mark.
  :
  :         SS EDUCATION?      expands the search from
  :                            EDUCATION to include EDUCATIONAL
  :
  :         SS WOM?N           retrieves both WOMAN and WOMEN
  :
TH:          Press "return" to continue
a:
CA:12
CL:
CA:13,5
T: If your subject term is two or more words that must
  :      be in the article in the order you have listed, or
  :      has punctuation, use (W) or () between the words.
  :
  :              SS CARDIOVASCULAR()DISEASE
  :
  :      () also helps when a word might be listed as one
  :      or two words or hyphenated.
  :
  :        SS SELF()ESTEEM     finds both self esteem and self-esteem
FOOT:
```

```
CH:
CA:3,5
T: You can also narrow or broaden your search by
 :     connecting your terms with OR, AND, or NOT.
 :
 :
 :       SS NUTRASWEET OR ASPARTAME OR SACCHARIN
 :          creates a set that includes all of these terms
 :
 :       SS ASPARTAME AND DIABET?
 :          creates a set that includes only those
 :          records that mention both of these terms
 :
 :       SS SWEETNERS()ARTIFICIAL NOT SACCHARIN
 :          creates a set that includes all records on
 :          artificial sweetners except those mentioning
 :          saccharin
FOOT:
CH:
CA:5,5
T: You can also further combine sets while you search.
:  For example, when using subject terms with (), you will
:  get better results searching with that term by itself
:  first, and then combining the results with additional terms.
:
:
:     ? ss sweetners()artificial
:
:         S1    21076  SWEETNERS
:         S2    13167  ARTIFICIAL
:         S3     9873  SWEETNERS()ARTIFICIAL
:
:     ? ss s3 not cyclamate?
:
:               9873  S3
:         S4    3478  CYCLAMATE?
:         S5    6395  S3 NOT CYCLAMATE?
:
:
FOOT:
CH:
CA:3
T:      ---------------------------------------------------
:       |                                                 |
:       |  test the success of your search terms by viewing |
:       |                                                 |
:       ---------------------------------------------------
:
```

```
:          The command used to display the results of a search
:        is TYPE (abbreviated T).  For this command you must
:        specify a set number, the format for the display,
:        ard which records from the set are to be displayed.
:
:                              T4/3/2,6,8-9
:                                 means
:              TYPE set 4/in format 3/records 2, 6, and 8-9
:
TH:           Press "return" to continue
A:
CA:18
CL:
CA:18
T:       A database may offer up to nine different formats
:        for display.  Each format displays different parts
:        of a record.  The basic formats are
:
:          FORMAT        CONTENT
:            2           Complete record except abstract
:            3           Bibliographic citation
:            7           Bibliographic citation and abstract
FOOT:
CH:
CA:3,5
T: The DIALOG Bluesheets give further commands and
:    search terms unique to each database.  There are,
:    for example, ways to limit a search to journals
:    published in a particular year or to find only
:    those articles published in a certain language.
:
:     DIALOG also has an EXPLAIN command to request
:    help messages about commands, databases, etc.
:    The abbreviation is a question mark (?).
:    When you are online, ?EXPLAIN gives a complete
:    listing of the EXPLAIN commands.
:
:
:
:          Would you like to review the basic
TH:        search commands covered so far?  (Y or N)
A:
M:N
JY:*BCOM
JN:*REVIEW
```

```
*REVIEW
CH:
CA:5,5
T:  COMMANDS
 :          SS     tells the computer to search the database and
 :                 find those records containing the terms you listed
 :
 :          T      tells the computer to display the retrieved records
 :                  "T" must be followed by a set number, a format
 :                  number, and the number of records you want displayed
 :
 :
 :      SEARCH TERMS
 :          OR     finds all the records that mention any or all of
 :                 the terms
 :
 :          AND    finds only those records which mention all of the
 :                 terms
 :
 :          NOT    eliminates from your search all records containing
 :                 the listed term
 :
 :          ()     tells the computer that the terms on either side
 :                 must be listed exactly that way in the records.
 :                 Hyphenated words are also retrieved.
FOOT:
*quiz1
CH:
CA:10
T: To tell the computer to display the first three records of set 4
 : in format 3 (bibliographic citation), you would enter
 :
 :          a.  T#4,3,1,2,3
 :          b.  T4/3/3
 :          c.  T4/3/1-3
 :
TH: Enter your answer:
AS:$s$
M:c
jy:*ans2
jn:*ans1
R:ALLOWS RETEST OF MISSED ITEMS

*ans1
CH:
CA:10
T:                    Sorry, that was not the correct answer.
TH:                      Would you like to try again?  y/n
AS:$s$
M:y
jy:*quiz1
jn:*quiz2
```

```
*ans2
CH:
CA:10
T:                    Good!  That was the correct answer.
 :
TH:                           Press "RETURN" to continue:
AS:
*quiz2
CH:
CA:7
T:  To retrieve all records on learning disabilities, you
 :   would enter
 :
 :         a.  SS LEARNING DISABILITIES
 :
 :         b.  SS LEARNING()DISABILITIES
 :
 :         c.  SS LEARNING AND DISABILITIES
 :
TH:  Enter your answer:
AS:$S$
M:a,b,c
JM:*ans3,*ans4,*ans5
JN:*typo1

R:ALLOWANCE FOR TYPOS
*typo1
T:Please enter only a, b, or c
PA:5
J:*quiz2
*ans3
CH:
CA:10
T:             Sorry, that is not correct.  It would work on
 :              the PALS online, which automatically adds
 :              the AND connector, but on DIALOG this would
 :              produce an empty set.
TH:                   Would you like to try again?  y/n
AS:$s$
M:y
JY:*quiz2
JN:*quiz3
```

```
*ans5
CH:
CA:10
T:              This will work, but it is not the best answer.
 :               Entering "SS LEARNING AND DISABILITIES" will
 :               retrieve those records on learning disabilities,
 :               but it will also retrieve records on learning
 :               about physical disabilities, etc.
TH:                   Would you like to try again?  y/n
AS:$s$
M:Y
JY:*quiz2
JN:*quiz3
*ans4
CH:
CA:15
T:                    Very good!  That is the correct answer.
 :
TH:                         Press "RETURN" to continue
AS:
*quiz3
CH:
CA:7
T:           To further search records from a set you have already
 :             created containing records on NutraSweet (set 4) for
 :             only those about hyperactivity, you would enter
 :
 :                 a.  SS S4 OR HYPERACTIVITY
 :
 :                 b.  SS S4 AND HYPERACTIVITY
 :
 :                 c.  SS S4 AND HYPERACTIV?
 :
 :
TH:            Enter your answer:
AS:$s$
M:a,b,c
JM:*ans6,*ans7,*ans8
JN:*typo2
*typo2
T:Please enter only a, b, or c
PA:5
J:quiz3
```

```
*ans6
CH:
CA:7
T:          Unfortunately, the OR term has now expanded what
 :           you found to include ALL records about hyperactivity,
 :           whether or not they mention NutraSweet.
TH:               Would you like to try again?  y/n
AS:$s$
M:y
JY:*quiz3
JN:*BCOM
*ans7
CH:
CA:10
T:           Very good!  This is a correct answer.  Using
 :             HYPERACTIV? would also have worked, as it
 :             would have retrieved both HYPERACTIVITY and
 :             HYPERACTIVE.
 :
TH:              Press "RETURN" to continue
AS:
J:*BCOM
*ans8
CH:
CA:15
T:             Excellent!  This is the best possible answer.
 :
TH:                Press "RETURN" to continue
AS:
*BCOM
CH:
CA:5
T:     The final step before logging on to DIALOG is to look
 :     through the DIALOG Bluesheets and
 :
 :        ---------- ----------------------------------------
 :        |                                                  |
 :        |   choose databases best suited for your search   |
 :        |                                                  |
 :        ----------------------------------------------------
 :
 :     The Bluesheets explain what each database covers, as well
 :     as listing the commands and search limitations unique to
 :     the database.  And, most important, the Bluesheets give
 :     the code number you need to be able to log on to the
 :     database once you are on DIALOG.  Some databases have more
 :     than one number, where one number is for the older records
 :     (say, 1966-1975) and the other is for the more current ones.
 :
FOOT:
```

```
CH:
CA:7
T:      In order to log on to a database, you must enter the BEGIN
 :      command (abbreviated B) followed by a space. and then the
 :      the number of the database.
 :
TH:     Press "RETURN" to continue:
A:
CA:11
CL:
CA:11
T:      Many libraries have to set up an account on DIALOG for the
 :      online charges, so this program will not show you how to
 :      log on to DIALOG itself.  Instead, it will pick up where
 :      you would be after the librarian has logged on and set up
 :      the online charges account.
 :
FOOT:   If you are ready to begin, press 'RETURN':
CH:
CA:2
T:  Dialog automatically logs on in the ERIC files.  For this program,
 :  if you wish to attempt ERIC, enter "B 1" at the ? prompt.  If you
 :  wish to try the biomedicine databases enter  B 218" at the ? prompt.
T:-------------------------------------------------------------------------
 :
 :
 :
 :
 :Welcome to DIALOG
 :Dialog level 16.4.5B
 :
 :Last logoff    29apr88 15:19:37
 :Logon file001 07may88 10:20:37
 :**********************************
 :
 :File   1:ERIC - 66-88/APR
 :
 :       Set   Items   Description
 :       ---   -----   -----------
C:$rdate=$date
C:$start=$time
R:SET CLOCK
C:p=0
R:SET PRINT COUNTER
TH:?
A:
M:b 1,b 218
JM:*eric,*cinahl
```

```
*eric
CH:
CA:3
T: You are doing a search for articles on computer technology
 : and severely handicapped students.  The subject terms you
 : have found in RESOURCES IN EDUCATION are
 :
 :    COMPUTER ASSISTED INSTRUCTION
 :    SEVERE DISABILITIES
 :
 : After you have found your final set, display the first
 : three results using format 2  (hint: Tsetnumber/2/1-3)
 :
T:-------------------------------------------------------
 :
 :
 :Logon file001 $rdate  $start
 :**************************************
 :
 :File   1:ERIC - 66-88/APR

 :       Set  Items  Description
 :       ---  -----  -----------
C:s=0
R:BEGIN SET COUNTER
C:q=0
R:BEGIN MISTAKE COUNTER

TH:?
   INMAX:80
A:
M:SS CO*R( )AS*D( )INS*N,SS SE*E( )DI*S,SS SE*E AND DI*S,SS CO*R AND A*D AND I*N
R:POSSIBLE ANSWERS; unfortunately, matches only work on one line, so
R: answers must be abbreviated and only the very basic terms are entered--
R: which means this will not be an exact match of the results DIALOG would
R: provide
JM:*hit1,*hit2,*hit4,*hit3
M:SS CO*R AS*D IN*N,SS SE*E D*S
JM:*mst1,*mst2
JN:*miss1
```

```
*hit1
C:s=s+1
T:    S#s      30615     COMPUTER
C:s=s+1
T:    S#s      12344     ASSISTED
C:s=s
T:    S#s     122923     INSTRUCTION (PROCESS BY WHICH KNOWLEDGE...)
C:s=s+1
T:    S#s      10099     COMPUTER( )ASSISTED( )INSTRUCTION
TH:?
   INMAX:50
A:
M:SS SEVERE( )DISABILITIES,SS S? AND S?, SS SEVERE AND DISABILITIES
JM:*hit2,*match2,*hit4
JN:*miss1

*hit2
C:s=s+1
T:    S#s       3901     SEVERE
C:s=s+1
T:    S#s      22327     DISABILITIES (PHYSICAL, MENTAL, OR SENSORY...)
C:s=s+1
T:    S#s       1807     SEVERE( )DISABILITIES
TH:?
   INMAX:50
A:
M:SS COMPUTER( )ASSISTED( )INSTRUCTION,SS S? AND S?, SS CO*R AND A*D AND I*N
JM:*hit1,*match1,*hit3
JN:*miss1

*hit3
C:s=s+1
T:    S#s      30615     COMPUTER
C:s=s+1
T:    S#s      12344     ASSISTED
C:s=s+1
T:    S#s     122923     INSTRUCTION  (PROCESS BY WHICH KNOWLEDGE, ATT...)
C:s=s+1
T:    S#s      10823     COMPUTER AND ASSISTED AND INSTRUCTION
TH:?
   INMAX:50
A:
M:SS SEVERE AND DISABILITIES,SS SEVERE( )DISABILITIES,SS S? AND S?
JM:*hit4,*hit2,*match4
JN:*miss1
```

```
*hit4
C:s=s+1
T:    S#s       3901     SEVERE
C:s=s+1
T:    S#s      22327     DISABILITIES  (PHYSICAL, MENTAL, OR SENSORY IMPA...)
C:s=s+1
T:    S#s       1807     SEVERE AND DISABILITIES
TH:?
   INMAX:50
A:
M:SS CO*R AND A*D AND IN*N,SS CO*R( )AS*D( )IN*N,SS S? AND S?
JM:*hit3,*hit1,*match3
JN:*miss1

*miss1
R:AFTER TWO MISTAKES JUMP TO REINFORCED DIRECTIONS
J(q):*direct
C:q=q+1
T:-------------------------------------------------------------
 :   Sorry, can only input so many different terms for searching.
 :   the best terms are still
 :
 :      SS COMPUTER( )ASSISTED( )INSTRUCTION
 :                    or
 :      SS SEVERE( )DISABILITIES
 :
 :
 :   try those
 :-------------------------------------------------------------
TH:?
   INMAX:50
A:
M:SS COMPUTER( )ASSISTED( )INSTRUCTION,SS SEVERE( )DISABILITIES
JM:*hit1,*hit2
JN:*miss1

*mst1
C:s=s+1
T:    S#s          0     COMPUTER ASSISTED INSTRUCTION
TH:?
   INMAX:50
A:
M:SS CO*R( )AS*D( )IN*N,SS SE*E( )DI*S,SS CO*R AND A*D AND I*N,SS S*E AND D*S
JM:*hit1,*hit2,*hit3,*hit4
JN:*miss1
```

```
*mst2
C:s=s+1
T:    S#s           0     SEVERE DISABILITIES
TH:?
   INMAX:50
A:
M:SS CO*R( )AS*D( )IN*N,SS SE*E( )DI*S,SS CO*R AND A*D AND I*N,SS S*E AND D*S
JM:*hit1,*hit2,*hit3.*hit4
JN:*miss1

*match1
C:s=s+1
T:    S#s       10099     COMPUTER( )ASSISTED( )INSTRUCTION
C:s=s+1
T:    S#s        1807     SEVERE( )DISABILITIES
C:s=s+1
T:    S#s           3     COMPUTER( )ASSISTED( )INSTRUCTION AND SEVERE( )...
TH:?
A:
M:T*/2/1-3
JM:*type1
JN:*miss2

*match2
C:s=s+1
T:    S#s        1807     SEVERE( )DISABILITIES
C:s=s+1
T:    S#s       10099     COMPUTER( )ASSISTED( )INSTRUCTION
C:s=s+1
T:    S#s           3     SEVERE( )DISABILITIES AND COMPUTER( )ASSISTED( )...
TH:?
A:
M:T*/2/1-3
JM:*type1
JN:*miss2

*match4
C:s=s+1
T:    S#s        1807     SEVERE AND DISABILITIES
C:s=s+1
T:    S#s       10823     COMPUTER AND ASSISTED AND INSTRUCTION
C:s=s+1
T:    S#s           3     SEVERE AND DISABILITIES AND COMPUTER AND ASSISTED...
TH:?
A:
M:T*/2/1-3
JM:*type1
JN:*miss2
```

```
*match3
C:s=s+1
T:    S#s       10823    COMPUTER AND ASSISTED AND INSTRUCTION
C:s=s+1
T:    S#s        1807    SEVERE AND DISABILITIES
C:s=s+1
T:    S#s           3    COMPUTER AND ASSISTED AND INSTRUCTION AND SEVERE AND...
TH:?
A:
M:T*/2/1-3
JM:*type1
JN:*miss2

*direct
T:-------------------------------------------------------------------
 :    This program is not linked online to DIALOG.  This is only a
 :    small simulation of DIALOG's responses to preset terms, so
 :    you MUST use the terms that were given.
 :
 :    As online charges add up quickly, this program is attempting
 :    to teach you basic skills for searching quickly and efficiently.
 :
 :
PA:10
T:    Therefore, given the term "computer assisted instruction", you
 :    search the database by entering at the ? prompt
 :
 :    SS COMPUTER()ASSISTED()INSTRUCTION
 :-------------------------------------------------------------------
TH:?
A:
M:SS COMPUTER()ASSISTED()INSTRUCTION
JM:*dir1
JN:*rep

*rep
T:    Enter the command exactly as given
 :
TH:?
A:
M:SS CO*R()AS*D()IN*N,SS SE*E()DIS*S,SS S4 AND S7
JM:*dir1,*dir2,*dir3
```

```
*dir1
T:    S1        30615   COMPUTER
 :    S2        12344   ASSISTED
 :    S3       122923   INSTRUCTION  (PROCESS BY WHICH KNOWLEDGE...)
 :    S4        10099   COMPUTER( )ASSISTED( )INSTRUCTION
 :                      ------------------------------------------------
 :                      |  This gives you a large set of records on the |
 :                      |  subject.  But you are searching for articles |
 :                      |  about severely disabled students' use of     |
 :                      |  computer assisted instruction.  So your next |
 :                      |  step is to use the other term found in RIE   |
 :                      |  and enter                                    |
 :                      |     SS SEVERE( )DISABILITIES                  |
 :                      ------------------------------------------------
TH:?
A:
M:SS SEVERE( )DISABILITIES
JM:*dir2
JN:*rep

*dir2
T:    S5         3901   SEVERE
 :    S6        22327   DISABILITIES (PHYSICAL, MENTAL, OR SENSORY...)
 :    S7         1807   SEVERE( )DISABILITIES
 :                      ------------------------------------------------
 :                      |  Now you have two large sets of records.      |
 :                      |  Rather than looking through each set record  |
 :                      |  by record (VERY expensive in online time),   |
 :                      |  your next step would be to combine the sets  |
 :                      |  and thus retrieve only those records that    |
 :                      |  mention both computer assisted instruction   |
 :                      |  (set 4) AND severe disabilities (set 7).     |
 :                      |  Enter    SS S4 AND S7                        |
 :                      ------------------------------------------------
TH:?
A:
M:SS S4 AND S7
JM:*dir3
JN:*rep

*dir3
T:              10099   S4
 :               1807   S7
 :    S8            3   S4 AND S7
 :                      ------------------------------------------------
 :                      |  Now you have a manageable set to display (or |
 :                      |  later print).  To doublecheck that you have  |
 :                      |  indeed found articles on severely disabled   |
 :                      |  students and computer usage, enter           |
 :                      |           T8/2/1-3                            |
 :                      ------------------------------------------------
```

```
C:s=10
TH:?
A:
M.T8/2/1-3
JM:*type1
JN:*miss2

*miss2
T:-------------------------------------------------------------
 :   The display (T) command is very strict in DIALOG.  You
 :   must enter Tsetnumber/format/records.  In this instance
 :   enter T10/2/1-3 at the ? prompt.
 :-------------------------------------------------------------
TH:?
A:
M:T10/2/1-3
JM:*type1
JN:*miss2

*type1
CH:
C:p=p+3
T:
 :
 : 10/2/1
 :EJ335973   EC182609
 :  Analyses of Performance, Behavior, and Predictors for Severely
 :Disturbed Children:  A Comparison of Adult vs. Computer Instruction.
 :  Plienis, Anthony J.; Romanczyk, Raymond G.
 :  Analysis and Intervention in Developmental Disabilities, v5 n4
 :p345-56 1985
 :  Available from: UMI
 :  Language: English
 :  Document Type: JOURNAL ARTICLE (080); RESEARCH REPORT (143)
 :  Journal Announcement: CIJSEP86
 :  Descriptors:  *Behavior Problems;  *Computer Assisted Instruction;
 :Elementary Secondary Education; *Emotional Disturbances; Prediction;
 :*Program Effectiveness; *Severe Disabilities; *Teacher Effectiveness
 :
 : 10/2/2
 :ED276239   EC191357
 :  Integrating Computer Technology with Severely Handicapped and Learning
 :Handicapped Students.
PA:10
R:SLOWS THE SCREEN SCROLL DOWN SO PEOPLE CAN READ RESULTS
T:  Kleitman, Richard; And Others
 :  1986
 :  13p.; In: Murphy, Harry J. Ed.; Dunnigan, J. A., Ed. Computer
 :Technology and Persons with Disabilities: Proceedings of the Conference
 :(Northridge, California, October 17-19, 1985); see EC 191 351.
```

```
 : EDRS Price - MF01/PC01 Plus Postage.
 :  Language: English
 :  Document Type:  PROJECT DESCRIPTION (141); CONFERENCE PAPER (150)
 :  Geographic Source: U.S.; California
 :  Journal Announcement: RIEAPR87
 :  Descriptors:  *Computer Assisted Instruction; *Computer Software;
:Elementary Secondary Education; *Emotional Disturbances, *Language
:Arts; *Learning Disabilities; *Severe Disabilities; Teaching Methods,
:Word Processing
 :
PA:10
T: 10/2/3
 :ED109864#   EC073396
 :  Normalization (Handicapped): A Selective Bibliography.  Exceptional
:Child Bibliography Series No. 650.
 :  Council for Exceptional Children, Reston, Va. Information Services
:and Publications.
 :  [1975
 :  30p.
 :  Sponsoring Agency: National Inst. of Education (DHEW), Washington, D.C.
 :  Available from: The Council for Exceptional Children Information Center,
:1920 Association Drive, Reston, Virginia 22091 ($4.00)
 :  Document Not Available from EDRS.
 :  Language:  ENGLISH
 :  Document Type: BIBIOLOGRAPHY (131)
 :  Journal Announcement: RIEDEC75
 :  Descriptors: Abstracts; *Bibliographies: Emotional Disturbances;
:Equal Education; Exceptional Child Education; Exceptional Child Services;
:Group Experience; *Handicapped Children; Hearing Impairments; Mainstreaming;

PA:10
T:*Mental Retardation; *Normalization (Handicapped); Physical Disabilites;
 :*Severe Disabilities; Visual Impairments
 :
 :-------------------------------------------------------------
 :  Of course, the actual DIALOG terminal will allow you to scroll
 :  (move the items on) the screen up and down so you can review
 :  the results of your SS and/or T commands and refine your search
 :  still further.
 :
 :  For example, the term "Emotional Disturbances" is in all three
 :  of the displayed records.  If you were doing an actual search,
 :  you might decide to expand the search (3 records, after all, are
 :  not much help on a research paper) using that term.  If you would
 :  like to, resume searching at the ? prompt and display the first
 :  three records of your final set.  If you'd rather try another
 :  database, enter "B 218" at the prompt.  If you would rather stop
 :  the program, then just press "RETURN".
 :
 :-------------------------------------------------------------
 :
```

```
TH:?
A:
M: B 218, SS EMOTIONAL()DISTURBANCES,SS EMOTIONAL AND DISTURBANCES
JM:*cinahl,*next1,*next2
M:SS EMOTIONAL DISTURBANCES
JM:*mst3
JN:*logoff1

*logoff1
CH:
CA:5
T:  When you have finished a search, you will usually want the results
 :  printed.  Since printing charges vary, you will want to consult a
 :  librarian at this point.
 :
 :  Since the librarian will have to close the account for the charges
 :  once you are done with the search, this program will not demonstrate
 :  how to logoff from DIALOG.  But the next screen will show how
 :  quickly charges add up online.
 :
 :  If you would like to attempt an online DIALOG search, contact
 :  Kathy Sullivan (457-5150), Periodicals Department at Maxwell
 :  Library, WSU, to set up an appointment.  Remember to mention
 :  that you have survived this simulated program.
 :
FOOT:
C:$finish=$time
CH:
CA:5

T:   $rdate    $finish  Usersample
 :       $5.79    0.193 Hrs File1
 :       $0.10    each  Type in Format 2
 :                #p    Types
 :  $6.69 Estimated cost File1
 :  $1.54 Dialnet
 :  $7.63 Estimated cost this search
 :  $7.63 Estimated total session cost   0.193 Hrs.
 :
E:
*next1
C:s=s+
T:   S#s       12626   EMOTIONAL
C:s=s+1
T:   S#s        3827   DISTURBANCES
C:s=s+1
T:   S#s        3588   EMOTIONAL()DISTURBANCES
J:*contin
```

```
*next2
C:s=s+1
T:    S#s       12626    EMOTIONAL
C:s=s+1
T:    S#s        3827    DISTURBANCES
C:s=s+1
T:    S#s        3588    EMOTIONAL AND DISTURBANCES
J:*contin

*mst3
C:s=s+1
T:    S#s           0    EMOTIONAL DISTURBANCES
TH:?
A:
M:SS EMOTIONAL()DISTURBANCES,SS EMOTIONAL AND DISTURBANCES
JM:*next1,*next2
JN:*mst4

*mst4
T:-----------------------------------
 :    DIALOG would accept either
 :      SS EMOTIONAL()DISTURBANCES
 :   or SS EMOTIONAL AND DISTURBANCES
 :-----------------------------------
J:*next1

*contin
T:
T:-------------------------------------------------------------------
 :    If you were actually on DIALOG, you would be able to scroll
 :    the screen and get the set number for COMPUTER()ASSISTED()
 :    INSTRUCTION.  In this case, the set number for COMPUTER()
 :    ASSISTED()INSTRUCTION is S4.
 :-------------------------------------------------------------------
 :
TH:?
A:
M:SS S* and S?,SS S? and S*
JM:*match5,*match5
JN:*miss3

*match5
T:              10099    S4
T:               3588    S#s
C:s=s+1
C:j=s-1
T:    S#s          18    S4 AND S#J
TH:?
A:
M:T*/2/1-3
JM:*type2
JN:*miss3
```

```
R:SINCE THIS IS THE SECOND SEARCH, MISTAKES GET DI LOG'S RESPONSE
*miss3
T:>>>COMMAND NOT FOUND
TH:?
A:
M:SS S? and S*,SS S* and S?,T*/2/1-3
JM:*match5,*match5,*type2
JN:*miss3

*type2
C:p=p+3
T:  #s/2/1
 :EJ362279    EC200941
 :  The Effects of Microcomputers on the Secondary Special
 :Education Classroom Ecology.
 :  Rieth, Herbert; And Others
 :  Journal of Special Education Technology, v8 n4 p36-45 Sum 1987
 :  Special Issue: TAM Conference Papers.
 :  Available from: UMI
 :  Language: English
 :  Document Type: JOURNAL ARTICLE (080); RESEARCH REPORT (143)
 :  Journal Announcement; CIJMAR88
 :  Descriptors:  *Classroom Environment; Computer Assisted Instruction;
 :*Emotional Disturbances; Individualized Instruction; Instructional
 :Effectiveness; *Learning Disabilities; *Microcomputers; *Mild Mental
 :Retardation; Resource Room Programs; Secondary Education; *Teacher Behavior
 :; Teaching Methods; Time on Task
 :
 :
 :  #s/2/2
 :EJ335873    EC182609
PA:10
T:  Analyses of Performance, Behavior, and Predictors for Severely
 :Disturbed Children: A Comparion of Adult vs. Computer Instruction.
 :  Plienis, Anthony J.; Romanczyk, Raymond G.
 :  Analysis and Intervention in Developmental Disabilities. v5 n4
 :p345-56 1985
 :  Available from: UMI
 :  Language: English
 :  Document Type: JOURNAL ARTICLE (080); RESEARCH REPORT (143)
 :  Journal Announcement: CIJSEP86
 :  Descriptors:  *Behavior Problems; *Computer Assisted Instruction;
 :Elementary Secondary Education; *Emotional Disturbances; Prediction;
 :*Program Effectiveness; *Severe Disabilities; *Teacher Effectiveness
 :
 : #s/2/3
 :EJ333142    EC182173
 :  Learner-Centered Software: A Survey of Microcomputer Use with
 :Special Needs Students.
PA:10
```

```
T:  Mokros, Jaice R.; Russell, Susan Jo
 :  Journal of Learning Disabilities, v19 n3 p185-90 Mar 1986
 :  Language: English
 :  Document Type: JOURNAL ARTICLE (080); RESEARCH REPORT (143)
 :  Journal Announcement: CIJJUL86
 :  Descriptors:  Computer Assisted Instruction; *Computer Software;
 :*Microcomputers; National Surveys; Trend Analysis
 :
 :
 :-----------------------------------------------------------------
 :  You have now learned all the basic commands and search
 :strategies needed to conduct a DIALOG search on ERIC.  If you
 :would like to attempt another database, enter "B 218' at the
 :? prompt.
 :If you would like to stop, hit RETURN.
 :-----------------------------------------------------------------
 :
TH:?
A:
M:B 218
JM:*cinahl
JN:*logoff1
E:

*cinahl
CH:
CA:3
T:  You are doing research on the effects of high technology in the
 :field of nursing.  After looking through the CUMULATIVE INDEX TO
 :NURSING AND ALLIED HEALTH LITERATURE at all the terms and approaches
 :available, you decide to narrow your search to that of VDTs (video
 :display terminals) on the health of nurses using them constantly.
 :
 :  The search terms you found used in CINAHL are
 :
 :                  COMPUTER TERMINALS
 :              and
 :                  STRESS, OCCUPATIONAL
 :
 :  After you have found your final set, display your results in
 : format 2 (hint: Tsetnumber/2/1-lastrecord).
 :-----------------------------------------------------------------
 :
C:s=0
R:BEGIN SET COUNTER
C:q=0
R:BEGIN MISTAKE COUNTER
```

```
T:File 218:NURSING & ALLIED HEALTH (cinahl) 83-88/Feb
 :    Set    Items    Description
 :    ---    -----    -----------
TH:?
A:
M:SS C*R()T*S,SS C*R AND T*S,SS ST*S()OC*L,SS ST*S AND OC*L
JM:*hit5,*hit6,*hit7,*hit8
M:SS C*R T*S,SS ST*S OC*L
JM:*mst5,*mst6
JN:*miss4

*hit5
C:s=s+1
T:    S#s     802     COMPUTER
C:s=s+1
T:    S#s      34     TERMINALS
C:s=s+1
T:    S#s      31     COMPUTER()TERMINALS
TH:?
A:
M:SS ST*S()OC*L,SS ST*S AND OC*L,SS S? AND S?
JM:*hit7,*hit8,*match6
JN:*miss4

*hit6
C:s=s+1
T:    S#s     802     COMPUTER
C:s=s+1
T:    S#s      34     TERMINALS
C:s=s+1
T:    S#s      31     COMPUTER AND TERMINALS
TH:?
A:
M:SS ST*S()OC*L,SS ST*S AND OC*L,SS S? AND S?
JM:*hit7,*hit8,*match6
JN:*miss4

*hit7
C:s=s+1
T:    S#s    1045     STRESS
C:s=s+1
T:    S#s    2567     OCCUPATIONAL
C:s=s+1
T:    S#s     453     STRESS()OCCUPATIONAL
TH:?
A:
M:SS CO*R()TER*LS,SS CO*R AND TER*LS,SS S? AND S?
JM:*hit5,*hit6,*match7
JN:*miss4
```

```
*hit8
C:s=s+1
T:    S#s    1045     STRESS
C:s=s+1
T:    S#s    2567     OCCUPATIONAL
C:s=s+1
T:    S#s     453     STRESS AND OCCUPATIONAL
TH:?
A:
M:SS CO*R()TER*LS,SS CO*R AND TER*LS,SS S? AND S?
JM:*hit5,*hit6,*match7
JN:*miss4

*mst5
C:s=s+1
T:    S#s        0     COMPUTER TERMINALS
TH:?
A:
M:SS CO*R()TER*S,SS CO*R AND TER*LS,SS ST*S()OC*L,SS ST*S AND OC*L
JM:*hit5,*hit6,*hit7,*hit8
JN:*miss4

*mst6
C:s=s+1
T:    S#s        0     STRESS OCCUPATIONAL
TH:?
A:
M:SS CO*R()TER*S,SS CO*R AND TER*LS,SS ST*S()OC*L,SS ST*S AND OC*L
JM:*hit5,*hit6,*hit7,*hit8
JN:*miss4

*miss4
J(q):*dir4
C:q=q+1
T:-------------------------------------------------------------------
 :    Sorry, but only so many search terms can be set into this
 : program.  So far the best subject terms are the ones from CINAHL:
 :
 :         SS COMPUTER()TERMINALS
 :                    or
 :         SS STRESS()OCCUPATIONAL   (remember, () replaces punctuation)
 :
 :      try those
 :-------------------------------------------------------------------
 :
TH:?
A:
M:SS COMPUTER()TERMINALS,SS STRESS()OCCUPATIONAL
JM:*hit5,*hit7
JN:*miss4
```

```
*match6
C:s=s+1
T:           453     S3
 :            31     S6
 :   S#s       5     S3 and S6
TH:?
A:
M:T*/2/1-5
JM:*type3
JN:*miss5

*match7
C:s=s+1
T:            31     S3
 :           453     S6
 :   S#s       5     S3 and S6
TH:?
A:
M:T*/2/1-5
JM:*type3
JN:*miss5

*dir4
T:-------------------------------------------------------------------
 :     This program is not linked online to DIALOG.  This is only a
 :     small simulation of DIALOG's responses to preset terms, so you
 :     MUST use the terms that were given.
 :
 :     As online charges add up quickly, this program is attempting to
 :     teach you basic skills for searching the databases quickly and
 :     efficiently.
 :
PA:10
T:     Therefore, given the term "computer terminals", you search the
 :     database by entering at the ? prompt
 :
 :          SS COMPUTER()TERMINALS
 :-------------------------------------------------------------------
TH:?
A:
M:SS COMPUTER()TERMINALS
JM:*dir5
JN:*rep2

*rep2
T:    Enter the command exactly as given
TH:?
A:
M:SS CO*R()T*LS,SS ST*S()OC*L,SS S3 AND S6
JM:*dir5,*dir6,*dir7
```

```
*dir5
  :    S1      802      COMPUTER
  :    S2       34      TERMINALS
  :    S3       31      COMPUTER( )TERMINALS
  :                     ------------------------------------------------
  :                     |  This gives you a good-sized set of records on |
  :                     |  the subject.  But you are searching for the   |
  :                     |  effects of terminals on the health of nurses. |
  :                     |  So your next step is to use the other term from|
  :                     |  CINAHL and enter   SS STRESS( )OCCUPATIONAL   |
  :                     ------------------------------------------------
TH:?
A:
M:SS STRESS( )OCCUPATIONAL
JM:*dir6
JN:*rep2

*dir6
T:    S4     1045      STRESS
  :   S5     2567      OCCUPATIONAL
  :   S6      453      STRESS( )OCCUPATIONAL
  :                    ------------------------------------------------
  :                    |  Now you have two large sets of records.  Rather|
  :                    |  than looking through each set record by record |
  :                    |  (VERY expensive in online time), your next step|
  :                    |  would be to combine the sets and retrieve only |
  :                    |  those mentioning both computer terminals (set 3)|
  :                    |  AND stress, occupational (set 6).  Enter       |
  :                    |        SS S3 AND S6                             |
  :                    ------------------------------------------------
TH:?
A:
M:SS S3 AND S6
JM:*dir7
JN:*rep2

*dir7
T:           31        S3
  :         453        S6
  :   S7      5        S3 AND S6
  :                    ------------------------------------------------
  :                    |  Now you have a manageable set to display (or  |
  :                    |  later print).  To doublecheck that you have   |
  :                    |  indeed found articles on VDTs and their       |
  :                    |  effects on nurses using them, enter           |
  :                    |        T7/2/1-5                                |
  :                    ------------------------------------------------
C:s=7
TH:?
A:
M:T7/2/1-5
JM:*type3
JN:*miss5
```

```
*miss5
T:-------------------------------------------------------------
 :     The display command (T) is very strict in DIALOG.
 :     You must enter Tsetnumber/format/records.  In this
 :     instance enter T7/2/1-5 at the ? prompt.
 :_____________________________________________________________
 :
TH:?
A:
M:T7/2/1-5
JM:*type3
JN:*miss5

*type3
C:p=p+5
T:  #s/2/1
 :0067645
 :  Video play terminals: how they affect the health of clerical workers
 :  Resko DR; Mansfield PK
 :  AAOHN J, 1987 Jul; 35(7): 310-4 (22 ref)
 :  Doc Type: survey
 :  Descriptors: * Computer Terminals ; * Occupational Health ; *
 :Stress, Occupational ; Women's Health ; Women, Working ; Adolescence
 :
 :  #s/2/2
 :0062560
 :  Visual display terminals and operator morbidity
 :  McAlister NH
PA:10
T:  CAN J PUBLIC HEALTH, 1987 Jan-Feb ; 78(1): 62-5 (23 ref)
 :  Descriptors: * Occupational Diseases ; * Computer Terminals ; *Eye
 :Diseases ; * Stress, Occupational
 :
 :  #s/2/3
 :0051032
 :  Occupational stress and VDUs
 :  Cox S; Cox T
 :  OCCUP HEALTH (LOND), 1986 Mar; 38(3): 89-91 (18 ref)
 :  Descriptors: * Stress, Occupational ; * Computer Terminals ;
 :Occupational Health
 :
 :  #s/2/4
 :0019240
PA:10
T:  Effects of computerization on work environment and health: from a
 :perspective of equality between sexes
 :  Bradley G
 :  OCCUP HEALTH NURS, 1983 Nov; 31(11): 35-9, 56-61 (4 ref)
 :  Doc Type: exam questions, research
 :  Descriptors: * Computers and Computerization ; * Occupational
```

```
 :Health ; * Work ; * Stress, Occupational ; * Computer Terminals ;
 :* Education, Continuing (Credit)
 :
 :  #s/2/5
 :0018050
 :  Health hazards of operating video display terminals
 :  Quinn N
 :  NURSE PRACT, 1983 Oct; 8(9): 49-50, 52, 54 (25 ref)
 :  Descriptors: * Computer Terminals--Utilization ; * Occupational
 :Hazards ; * Stress, Occupational ; * Quality of Working Life
PA:10
T:
 :-------------------------------------------------------------
 :   Since you found only five records on the subject in
 : CINAHL, you might want to try another database to continue
 : searching your subject.  Going through the DIALOG Bluesheets,
 : you would locate MEDLINE's database numbers and choose the
 : number covering recent years.  Enter "B 154" at the ? prompt.
 :-------------------------------------------------------------
 :
TH:?
A:
M:B 154
JM:*medl1
JN:*check1

*check1
R:EXIT
T:-------------------------------------
TH:  Would you like to stop the program?  (Y/N)
A:
M:Y
JM:*logoff2
JN:*retype

*retype
T:-------------------------------------
T:   Enter "B 154  at the ? prompt.
T:-------------------------------------
TH:?
A:
M:B 154
JM:*medl1
JN:*check1
```

```
*logoff2
CH:
CA:5
T:   When you have finished a search, you will usually want the
 :results printed.  Since printing charges vary, you will want
 :to consult a librarian at this point.
 :
 :   Since the librarian will have to close the account for the
 :charges once you are done with the search, this program will
 :not demonstrate how to logoff from DIALOG.  But the next screen
 :will show how quickly charges add up online.
 :
 :   If you would like to attempt an online DIALOG search, contact
 :Kathy Sullivan (457-5150), Periodicals Department at Maxwell
 :Library, WSU, to set up an appointment.  Remember to mention
 :that you have survived this simulated program.
 :
FOOT:
C:$finish=$time
CH:
CA:5
T:      $rdate   $finish     Usersample
 :         $5.79      0.193 Hrs File1 (if searched, otherwise $.60)
 :         $1.62      0.030 Hrs File218
 :         $0.00  per Types in Format 2
 :                 #p Types
 : $6.69   Estimated cost File1
 : $1.62   Estimated cost File218
 : $0.24   Dialnet
 : $1.86   Estimated cost this search
 :$10.09   Estimated total session cost    0.223 Hrs.
 :
E:

*medl1
CH:
CA:3
T:  While you were researching your subject terms, you
 :found that INDEX MEDICUS has the subject terms
 :
 :                    COMPUTERS
 :             and
 :                 ENVIRONMENTAL EXPOSURE
 :
 :  MEDLINE, like INDEX MEDICUS, indexes international
 :journals.  While you were studying the Bluesheets
 :to locate the code number for MEDLINE, you would
 :have noticed a special command to limit your search
 :to journals written only in English.  The command
 :(best used after you have found your final set, right
```

```
 :before you display it, rather than risk the confusion
 :of mixing subject terms and limitors) is
 :
 :              SS Ssetnumber/ENG
 :
 :  After you have found your final set, display
 :the first two records in format 2.
 :-----------------------------------------------
 :File 154:MEDLINE 83-88/MAY
C:s=0
R:BEGIN SET COUNTER
T:    Set  Items  Description
 :    ---  -----  -----------
TH:?
   INMAX:50
A:
M:SS C*RS AND E*L()E*E ,SS EN*L()EX*E,SS EN*L AND EX*E
JM:*hit12,*hit10,*hit11
M:SS C*RS AND E*L AND E*E,SS COMPUTERS
JM:*hit14,*hit9
JN:*miss6

*hit9
C:s=s+1
T:    S#s  11001     COMPUTERS
TH:?
A:
M:SS EN*L()EX*E,SS EN*L AND EX*E, SS S? AND S?,SS S*ENG
JM:*hit10,*hit11,*match8,*lim1
JN:*miss6

*hit10
C:s=s+1
T:    S#s  14021     ENVIRONMENTAL
C:s=s+1
T:    S#s  39278     EXPOSURE
C:s=s+1
T:    S#s   3219     ENVIRONMENTAL()EXPOSURE
TH:?
A:
M:SS CO*R,SS S? AND S?,SS S*ENG
JM:*hit9,*match9,*lim12
JN:*miss6

*hit11
C:s=s+1
T:    S#s  14021     ENVIRONMENTAL
C:s=s+1
T:    S#s  39278     EXPOSURE
```

```
C:s=s+1
1:    S#s    3239     ENVIRONMENTAL AND EXPOSURE
TH:?
A:
M:SS CO*R,SS S? AND S?,SS S*ENG
JM:*hit13,*match10,*lm12
JN:*miss6

*hit12
C:s=s+1
T:    S#s   11001     COMPUTERS
C:s=s+1
T:    S#s   14021     ENVIRONMENTAL
C:s=s+1
T:    S#s   39278     EXPOSURE
C:s=s+1
T:    S#s    3219     ENVIRONMENTAL(W)EXPOSURE
C:s=s+1
T:    S#s      14     COMPUTERS AND ENVIRONMENTAL()EXPOSURE
TH:?
A:
M:SS S*ENG,T*/2/1-2
JM:*matlm1,*type4
JN:*miss7

*hit14
C:s=s+1
T:    S#s   11001     COMPUTERS
C:s=s+1
T:    S#s   14021     ENVIRONMENTAL
C:s=s+1
T:    S#s   39278     EXPOSURE
C:s=s+1
T:    S#s      14     COMPUTERS AND ENVIRONMENTAL AND EXPOSURE
TH:?
A:
M:SS S*ENG,T*/2/1-2
JM:*matlm1,*type4
JN:*miss7

*miss6
T:-------------------------------------------------------------
 :   Sorry, but only so many search terms can be set into this
 :program.  So far the best subject terms are
 :
 :                  SS COMPUTERS
 :                       and
 :               SS ENVIRONMENTAL()EXPOSURE
 :
 :      try those
 :-------------------------------------------------------------
 :
```

```
TH:?
A:
M:SS COMPUTERS, SS ENVIRONMENTAL( )EXPOSURE
JM:*hit9,*hit10
JN:*miss6

*hit13
C:s=s+1
T:    S#s   11001     COMPUTERS
TH:?
A:
M:SS S? AND S?,SS S*ENG
JM:*match11,*lim4
JN:*miss6

*match8
C:s=s+1
T:    S#s    3219     ENVIRONMENTAL( )EXPOSURE
C:s=s+1
T:    S#s   11001     COMPUTERS
C:s=s+1
T:    S#s      14     ENVIRONMENTAL( )EXPOSURE AND COMPUTERS
TH:?
A:
M:T*/2/1-2,SS S*ENG
JM:*type4,*matlm1
JN:*miss7

*match9
C:s=s+1
T:    S#s   11001     COMPUTERS
C:s=s+1
T:    S#s    3219     ENVIRONMENTAL( )EXPOSURE
C:s=s+1
T:    S#s      14     COMPUTERS AND ENVIRONMENTAL( )EXPOSURE
TH:?
A:
M:T*/2/1-2,SS S*ENG
JM:*type4,*matlm1
JN:*miss7

*match10
C:s=s+1
T:    S#s   11001     COMPUTERS
C:s=s+1
T:    S#s    3239     ENVIRONMENTAL AND EXPOSURE
C:s=s+1
T:    S#s      14     COMPUTERS AND ENVIRONMENTAL AND EXPOSURE
TH:?
A:
M:T*/2/1-2,SS S*ENG
JM:*type4 *matlm1
JN:*miss7
```

```
*match11
C:s=s+1
T:    S#s   3239     ENVIRONMENTAL AND EXPOSURE
C:s=s+1
T:    S#s  11001     COMPUTERS
C:s=s+1
T:    S#s     14     ENVIRONMENTAL AND EXPOSURE
TH:?
A:
M:T*/2/1-2,SS S*ENG
JM:*type4,*matlm1
JN:*miss7

*miss7
R:JUST IN CASE USER FORGOT HOW MANY RECORDS TO DISPLAY
T:-------------------------------------------------
 :    The DISPLAY command in DIALOG is very strict.
 :     For this program, it is (insert your set number)
 :           Tsetnumber/2/1-2
 :-------------------------------------------------
TH:?
A:
M:T*/2/1-2
JM:*type4
JN:*miss7

*llm1
R:THE LIMIT SUBROUTINES WILL EVENTUALLY DEMONSTRATE THE
R:IMPORTANCE OF LIMITING SEARCHES BY LANGUAGE
C:x=s
C:s=s+1
1     S#s   9881     S#x/ENG
TH:?
A:
M:SS E*L()E*E,SS E*L AND E*E,SS S? AND S?
JM:*lm1,*lm2,*lm3
JN:*miss6

*lm1
C:s=s+1
T:    S#s  14021     ENVIRONMENTAL
C:s=s+1
T:    S#s  39278     EXPOSURE
C:s=s+1
T:    S#s   3219     ENVIRONMENTAL()EXPOSURE
TH:?
A:
M:SS S*ENG,SS S? AND S?
JM:*lm12,*lm4
JN:*miss6
```

```
*lm2
C:s=s+1
T:    S#s  14021     ENVIRONMENTAL
C:s=s+1
T:    S#s  39278     EXPOSURE
C:s=s+1
T:    S#s   3239     ENVIRONMENTAL AND EXPOSURE
TH:?
A:
M:SS S*ENG,SS S? AND S?
JM:*lm12,*lm5
JN:*miss6

*lm12
C:x=s
C:s=s+1
T:    S#s   3119     S#x/ENG
TH:?
A:
M:SS S? AND S?,SS COMPUTERS
JM:*lm13,*lm2
JN:*miss6

*lm13
C:x=s
C:y=s-4
T:          9881     S#y
C:s=s+1
T:          3119     S#x
T:    S#s     13     S#y AND S#x
TH:?
A:
M:T*/2/1-2
JM:*type5
JN:*miss8

*lm3
C:x=s
C:y=s-2
T:          3219     S#y
C:s=s+1
T:          9881     S#x
T:    S#s     13     S#y AND S#x
TH:?
A:
M:T*/2/1-2
JM:*type5
JN:*miss8
```

```
*lm4
C:x=s
C:y=s-2
T:            3239    S#y
C:s=s+1
T:            9881    S#x
T:    S#s        13    S#y AND S#x
TH:?
A:
M:T*/2/1-2
JM:*type5
JN:*miss8

*lm5
C:x=s
C:y=s-2
T:            9881    S#y
C:s=s+1
T:            3239    S#x
T:    S#s        13    S#y AND S#x
TH:?
A:
M:T*/2/1-2
JM:*type5
JN:*miss8

*lim2
C:s=s+1
T:    S#s    11001    COMPUTERS
TH:?
A:
M:SS S*ENG,SS S? AND S?
JM:*lm22,*lm21
JN:*miss6

*lm21
C:x=s
C:y=s-1
T:             3119   S#y
C:s=s+1
T:            11001   S#x
T:    S#s         13   S#y AND S#x
TH:?
A:
M:T*/2/1-2
JM:*type5
JN:*miss8
```

```
*lm22
C:x=s
C:s=s+1
T:    S#s     9881    S#x/ENG
TH:?
A:
M:SS S? AND S?
JM:*lm23
JN:*miss6

*lm23
C:x=s
C:y=s-2
T:            3119    S#y
C:s=s+1
T:            9881    S#x
T:    S#s        13    S#y AND S#x
TH:?
A:
M:T*/2/1-2
JM:*type5
JN:*miss8

R:*lim3 was absorbed into *lm12

*lim4
C:x=s
C:s=s+1
T:    S#s     9881    S#x/ENG
TH:?
A:
M:SS S? AND S?
JM:*lm4
JN:*miss6

*matlm1
C:x=s
C:s=s+1
T:    S#s      13     S#x/ENG
TH:?
A:
M:T*/2/1-2
JM:*type5
JN:*miss8
```

```
*miss8
R:JUST IN CASE USER FORGOT HOW MANY RECORDS TO DISPLAY
T:-------------------------------------------------
 :   The DISPLAY command is very strict in DIALOG.
 :    For this program, it is (insert your set number)
 :           Tsetnumber/2/1-2
 :-------------------------------------------------
TH:?
A:
M:T*/2/1-2
JM:*type5
JN:*miss8

*type4
C:p=p+2
T:  #s/2/1
 :06426480   88071480
 :  Managing data quality through automation.
 :  O'Connor RW; Miller AK
 :  Northrop Services, Inc., Environmental Sciences, Research Triangle
 :Park, North Carolina 27709.
 :  Toxicology (IRELAND) Dec 1 1987, 47 (1-2) p109-18, ISSN 0300-483X
 :Journal Code: VWR
 :  Languages: ENGLISH
 :  Journal Announcement: 8803
 :  Subfile:  INDEX MEDICUS
 :  Tags: Animal
 :  Descriptors: *Automatic Data Processing; *Toxicology; Database Management
 :Systems; Environmental Exposure; Environmental Monitoring; Information
 :Systems; Quality Control; United States
 :
PA:15
T:  #s/2/2
 :06397009   88042009
 :  [Data processing system of personnel exposure with personal computer]
 :  Ogata Y; Takeshima K; Nishizawa K; Kojima S; Takata K
 :  Radioisotope Center. Nagoya University, Japan.
 :  Radioisotopes (JAPAN)  Jun 1987, 36 (6) p270-7, ISSN 0033-8303
 :Journal Code RBE
 :  Languages: JAPANESE  Summary Languages: ENGLISH
 :  Document Type: English Abstract
 :  Journal Announcement: 8802
 :  Subfile:  INDEX MEDICUS
 :  Descriptors:  *Air Pollution, Radioactive--Analysis--AN; *Computers;
 :*Microcomputers; *Radiation Monitoring--Methods--MT; *Software; Automatic
 :Data Processing; Environmental Exposure; Radiation Dosage
 :
PA:15
```

```
T:-----------------------------------------------------------------
 :  As you will have noticed from the results of this search,
 :neither of the two records found mentioned VDTs and their effects
 :upon their users.  If you were actually on DIALOG, you might try
 :other subject terms, such as those which worked in CINAHL.  Or
 :you might attempt another database.
 :
 :   You have now learned the basic commands and search strategies
 :needed to conduct a DIALOG search in the biomedical databases.
 :
 :   If you would like to go back and attempt the ERIC database,
 :enter "B 1" at the ? prompt.  If you wish to stop. press "RETURN".
 :-----------------------------------------------------------------
 :
TH:?
A:
M:B 1
JM:*eric
JN:*logoff3

*type5
C:p=p+2
T:  #s/2/1
 :06426480   88071480
 :  Managing data quality through automation.
 :  O'Connor RW; Miller AK
 :  Northrop Services, Inc., Environmental Sciences, Research Triangle
 :Park  North Carolina 27709.
 :  Toxicology (IRELAND)  Dec 1, 1987, 47 (1-2) p109-18, ISSN 0300-483X
 :Journal Code: VWR
 :  Languages: ENGLISH
 :  Journal Announcement:  8803
 :  Subfile:  INDEX MEDICUS
 :  Tags: Animal
 :  Descriptors: *Automatic Data Processing; *Toxicology; Database
 :Management Systems; Environmental Exposure; Environmental Monitoring;
 :Information Systems; Quality Control; United States
 :
PA:15
T:  #s/2/2
 :05854478   86155478
 :  A portable data-logging system for industrial hygiene personal chlorine
 :monitoring.
 :  Langhorst ML; Illes Sp Jr
 :  Am Ind Hyg Assoc J Feb 1986, 47 (2) p78-86, ISSN 0002-8894
 :Journal Code: 3CI
 :  Languages:  ENGLISH
 :  Journal Announcement: 8606
 :  Subfile:  INDEX MEDICUS
 :  Tags: Human
```

```
  :  Descriptors: *Air Pollutants, Occupational--Analysis--AN; *Chlorine
  :--Analysis--AN; *Computers; *Environmental Monitoring--Instrumentation
  :--IS; *Software; Diffusion; Environmental Exposure; Environmental
  :Monitoring--Methods--MT; Microcomputers
  :  CAS Registry No.: 7782-50-5  (Chlorine)
  :
PA:13
T:-------------------------------------------------------------------
  :  Looking at the results of this search, you will see that
  :neither of the two records listed has anything on VDTs and
  :their effect upon their users.  If you were actually on
  :DIALOG, you might try other subject terms, such as those which
  :worked in CINAHL.  Or you might attempt another database.
  :
  :   You have now learned the basic commands and search strategies
  :needed to conduct a DIALOG search in the biomedical databases.
  :
  :   If you would like to go back and attempt the ERIC database,
  :enter "B 1" at the ? prompt.  If you wish to stop, press "RETURN".
  :-------------------------------------------------------------------
  :
TH:?
A:
M:B 1
JM:*eric
JN:*logoff3

*logoff3
CH:
CA:5
T:   When you have finished a search, you will usually want the results
  :printed.  Since printing charges vary, you will want to consult a
  :librarian at this point.
  :
  :   Since the librarian will have to close the account for the charges
  :once you are done with the search, this program will not demonstrate
  :how to logoff from DIALOG.  But the next screen will show how quickly
  :charges add up online.
  :
  :   If you would like to attempt an online DIALOG search, contact
  :Kathy Sullivan (457-5150), Periodicals Department at Maxwell Library,
  :WSU, to set up an appointment.  Remember to mention that you have
  :have survived this simulated program.
  :
FOOT:
```

```
C:$finish=$time
CH:
CA:5
T:        $rdate     $finish      Usersample
  :            $5.79      0.193 Hrs File1 (if searched, otherwise $.60)
  :            $1.62      0.030 Hrs File218
  :            $1.33      0.037 Hrs File154
  :            $0.05   per Type in Format 2
  :                    #p  Types
  :       $6.69    Estimated cost File1
  :       $1.62    Estimated cost File218
  :       $1.50    Estimated cost File154
  :       $0.30    Dialnet
  :       $1.88    Estimated cost this search
  :      $11.97    Estimated total session cost    0.259 Hrs.
  :
E:
```