



# DECUS

## PROGRAM LIBRARY

DECUS NO.	8-724
TITLE	COMPUTER CATALOG SYSTEM
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COMPANY	Lehigh University Bethlehem, Pennsylvania
DATE	August 13, 1974
SOURCE LANGUAGE	FORTRAN and SABR

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GENERAL INFORMATION

Object Computer(s) PDP-8 Source Computer (if different) \_\_\_\_\_  
File Name Write, Modify, Search Version No. 1  
Title Computer Catalog System  
Author Preston M. Crabill  
Submitter (if other than author) \_\_\_\_\_  
Affiliation Lehigh University  
Address Box F - 31, Lehigh University  
Bethlehem, Pennsylvania 18015 Country USA  
Monitor/Operating System OS/3 DEC No. \_\_\_\_\_  
Core Storage Required Minimum of 8K Starting Address \_\_\_\_\_  
Peripherals Required Teletype and two DECTapes  
Other Software Required \_\_\_\_\_ DEC or DECUS No. \_\_\_\_\_  
Source Language FORTRAN and SABR Category Data Management, Business Application  
Restrictions, Deficiencies, Problems \_\_\_\_\_  
Date of Planned or Possible Future Revisions \_\_\_\_\_

TAPES AVAILABLE

Paper Tapes Object Binary  Object ASCII  Source  Other \_\_\_\_\_  
DECTape  LINCtape  Format \_\_\_\_\_ Magtape: 7 Track  9 Track  BPI \_\_\_\_\_  
Object Files  Source Files  Documentation Files  Other \_\_\_\_\_

ABSTRACT

# COMPUTER CATALOG SYSTEM

DECUS Program Library Write-up

DECUS NO. 8-724

## Abstract

These three Fortran programs were prepared to enable better accessibility to catalog files and to allow speedier information retrieval.

The **WRITE** program is set up to allow an operator to place catalog information on a specified file. The catalog information includes: categories (a means of easy cross reference), vendor names, and key words pertaining to the vendor's catalog.

The **MODIFY** program enables an operator to ask for a specific reference number and modify it to his liking.

The **SEARCH** program allows easy information retrieval. Key words, vendor names, or categories may be searched, and all of the information under pertinent reference numbers will be printed out on the teletype.

Write - up

These three programs -- WRITE, MODIFY, and SEARCH were prepared to run on a PDP-8 with an OS-8 operating system, using the OS-8 Fortran compiler. The starting address for OS-8 is 7600g. This system requires a teletype, two DECTapes, and a minimum of 8K of core. All commands and catalog information are entered form the teletype. DECTape 0 contains the OS-8 programs and the three catalog programs. DECTape 1 is reserved completely for the catalog files -- CATFIL.DA and the header file -- FILE.DA.

To initiate the catalog files, the following statements may be typed:

```
      .R EDIT      AND      .R EDIT
      *DTA1:CATFIL.DA      *DTA1:FILE.DA

      #A           #A
      O           O
      F           F
      E           E
      #E          #E

HIT  HIT
CTRL-CTRL-
C   C
```

(for each new DECTape, the files must be reinitiated!)

To load the ASCII paper tape of a program, the following example may be followed:

```
.R PIP
*DTA0:WRITE.AS<PTR:
```

(this will create WRITE.AS on DECTape 0.)

To run the ASCII files of the three programs, the following examples must be followed:

```
.R FORT      .R FORT      .R FORT
*WRITE.AS/I/O/G , *MODIFY.AS/I/O/G , *SEARCH.AS/G/I/O
```

(see sample runs on pages 11-14 for use of programs.)

Since the ASCII files of these programs take so long to compile, the operator may wish to save a core image of the programs on the DECTape. An example of this process is found on page three. Follow this example closely or the programs may be lost.

After the programs have been saved in core image eg. WRITE.SV, the three programs may now be run by typing an R and then the program name. eg. -- .R WRITE  
(see sample runs on pages 15-18 for use of the programs.)

R FORT

ACTIVITY: <WRITE, AS, I/O, L/M>

PROGRAM NAME

ALT KEY

MAIN	02560
OPEN	11633
WRITE	05064
IOH	06413
READ	05053
IOPEN	12202
FAD	10216
FSB	10205
CLEAR	07437
STO	10630
OOPEN	12225
OCLOS	12247
SUBSC	07462
EXIT	12133
ERROR	12013
DIV	07251
IEM	07355
FMP	11010
FLOT	11245
ISTO	10600
GENIO	11403
IFAD	11266
FDV	11073
FLOAT	11223
FIX	10674
IFIX	10733
ABS	10362
CHS	11336
IABS	07400
MPY	07206
IRDM	07421
CKIO	12141
CHAIN	12333

IN ORDER TO CUT BACK ON THE TIME OF ASSEMBLING THE PROGRAMS, EACH PROGRAM MAY BE SAVED IN CORE IMAGE.

THIS IS ACCOMPLISHED BY FOLLOWING THE EXAMPLE ON THE LEFT.

← MAP

0000	← AVAILABLE BLOCKS FIELDS 1 & 2
0025	
0036	
0036	← BLOCKS 3, 4 & 5 UNUSED
0036	

SAVE DTAB:WRITE, SV, 00000-07577, 10000-17577, 02560

SAME FOR ALL THREE PROGRAMS

COMES FROM MAIN ABOVE

WRITE A CATALOG FILE

THE PURPOSE OF THIS PROGRAM IS TO ENABLE AN OPERATOR TO PLACE  
A LIBRARY OR CATALOG FILE ON A COMPUTER DECTAPE. THE OPERATIONS  
FOR THE CATALOG SYSTEM ARE FOUND ON DECTAPE 0, AND THE ACTUAL  
CATALOG IS WRITTEN ON DECTAPE 1.

DIMENSION CAT(2), VNAME(5), DKEY(11)

WRITE (1,99)

FORMAT ('FOLLOW EACH LINE WITH A CR (CARRIAGE RETURN) !')

READ (1,2) DATE1,DATE2

FORMAT ('DATE ? ',A6)

READ (1,3) UNAME

FORMAT ('USER INITIALS ? ',A6)

OPEN INPUT ONTO DECTAPE ONE FOR THE HEADER FILE

INPUT HEADER FILE

CALL IOPEN ('DTA1', 'FILE')

READ(4,5)DTID, DTLRF, DTRF, DTNUM, DTNAM, DTDT1, DTDT2

FORMAT('F6, 2, 2F8, 0, 4A6')

CHECK THE IDENTIFICATION NUMBER ON THE DECTAPE

IF (DTID-576.69)10, 30, 10

READ (1,15) DTNUM

FORMAT ('DECTAPE NUMBER ? ',A6)

READ (1,20) DTRF

FORMAT ('FIRST REFERENCE NUMBER ? ',F8, 0)

DTID IS THE DECTAPE IDENTIFICATION NUMBER

DTLRF IS THE LAST REFERENCE NUMBER

DTRF IS THE FIRST REFERENCE NUMBER

DTNUM IS THE DECTAPE NUMBER

DTNAM IS THE USERS INITIALES

DTDT1 AND DTDT2 ARE THE DATE

RFC IS THE COUNTER USED TO REFERENCE THROUGH THE FILE

DTLRF=DTRF

DTNAM=UNAME

DTDT1=DATE1

DTDT2=DATE2

DTID=576.69

OPEN OUTPUT ONTO THE HEADER FILE FOR THE CATALOG SYSTEM

OUTPUT HEADER FILE

CALL OOPEN ('DTA1', 'FILE')

WRITE (4,5)DTID, DTLRF, DTRF, DTNUM, DTNAM, DTDT1, DTDT2

CALL OCLOSE

OPEN INPUT AND OUTPUT ONTO THE CATALOG FILE

CATALOG FILE

CALL IOPEN ('DTA1', 'CATFIL')

CALL OOPEN ('DTA1', 'CATFIL')

SET UP A LOOP TO READ AND WRITE THE DECTAPES INFORMATION

```

C      RFC=DTRRF
96      A=DTLRF-RFC
        IF(A) 101,102,101
101     READ (4,80) DTRF
80      FORMAT (F8.0)
        READ (4,81) (CAT(I), I=1,2)
81      FORMAT (2A6)
        READ (4,82) (VNAME(I), I=1,5)
82      FORMAT (5A6)
        READ (4,83) (DKEY(I), I=1,11)
83      FORMAT (11A6)
        WRITE (4,80) DTRF
        WRITE (4,81) (CAT(I), I=1,2)
        WRITE (4,82) (VNAME(I), I=1,5)
        WRITE (4,83) (DKEY(I), I=1,11)
C
C      INCREMENT THE REFERENCE COUNTER
C
        RFC=RFC+1
        GO TO 96
102     DTRF=DTLRF
61      CONTINUE
C
C      THE OPERATOR ENTERS THE CATALOG INFORMATION UNDER THESE FORMATS
C
50      WRITE (1,62) DTRF
62      FORMAT ('REFERENCE NUMBER ? ',F8.0)
        READ (1,63) (CAT(I), I=1,2)
63      FORMAT ('CATEGORIES ? ',2A6)
        READ (1,64) (VNAME(I), I=1,5)
64      FORMAT ('VENDOR NAME ? ',5A6)
        READ (1,65) (DKEY(I), I=1,11)
65      FORMAT ('KEY WORDS ? ',11A6)
        WRITE (1,17)
17      FORMAT(/)
C
C      IF THE OPERATOR WISHES TO SAVE THE INFORMATION, A 1 IS TYPED,
C      AND THE FILE IS CONSEQUENTLY WRITTEN ON DECTAPE 1. IF A
C      MISTAKE WAS MADE, A 0 IS TYPED, AND NEW INFORMATION UNDER THE
C      SAME REFERENCE NUMBER IS ENTERED. IF A -1 IS TYPED, THE FILE
C      WILL NOT BE KEPT, THE INPUT WILL END, AND THE PROGRAM WILL
C      TERMINATE.
C
        READ (1,66) DANS
66      FORMAT ('SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? ',I2)
        IF (DANS)68,61,67
C
C      THE CATALOG INFORMATION IS WRITTEN ON THE DECTAPE UNDER THESE FORMATS
C
67      WRITE (4,80) DTRF
        WRITE (4,81) (CAT(I), I=1,2)
        WRITE (4,82) (VNAME(I), I=1,5)
        WRITE (4,83) (DKEY(I), I=1,11)
        DTRF=DTRF+1
        GO TO 50
68      DTLRF=DTRF
        CALL OCLOSE

```



C  
C  
C  
C

OPEN OUTPUT ONTO THE HEADER FILE TO UPDATE THAT FILE  
UPDATE HEADER FILE

CALL OOPEN ('DTA1', 'FILE')  
WRITE (4, 5) DTID, DTLRF, DTRFR, DTNUM, DTNAM, DTDT1, DTDT2  
CALL OCLOSE

C  
100

CALL EXIT  
END

C  
C  
C

MODIFY A CATALOG REFERENCE

THE PURPOSE OF THIS PROGRAM IS TO ENABLE AN OPERATOR TO MODIFY A  
STORED REFERENCE OF A CATALOG FILE ON A COMPUTER DECTAPE  
DIMENSION ALL VARIABLES NECESSARY

DIMENSION CAT(2), VNAME(5), DKEY(11)  
WRITE (1, 42)  
42 FORMAT ('FOLLOW EACH LINE WITH A CR (CARRIAGE RETURN) !')  
WRITE (1, 43)  
43 FORMAT ('PRECEED THE DATE WITH TWO SPACES')  
READ (1, 2) DATE1, DATE2  
2 FORMAT ('DATE ? ', 2A6)  
READ (1, 3) UNAME  
3 FORMAT ('USER INITIALS ? ', A6)  
C  
C

C  
C  
OPEN INPUT AND OUTPUT FOR THE HEADER FILE

OPEN HEADER FILE

CALL IOPEN ('DTA1', 'FILE')  
CALL OOPEN ('DTA1', 'FILE')  
41 READ (4, 41) DTID, DTLRF, DTRFR, DTNUM, DTNAM, DTDT1, DTDT2  
FORMAT ('F6. 2, 2F8. 0, 4A6')  
WRITE (4, 41) DTID, DTLRF, DTRFR, DTNUM, DTNAM, DTDT1, DTDT2

CLOSE HEADER FILE

CALL OCLOSE

C  
C  
WRITE OUT THE LAST REFERENCE NUMBER IN THE FILE

44 WRITE (1, 44) DTLRF  
FORMAT ('THE LAST REFERENCE NUMBER IS ', F8. 0)

C  
C  
OPEN INPUT AND OUTPUT FOR THE CATALOG FILE

OPEN CATALOG FILE

5 CALL IOPEN ('DTA1', 'CATFIL')  
CALL OOPEN ('DTA1', 'CATFIL')  
WRITE (1, 29)  
29 FORMAT ('/')

C  
C  
ENTER THE REFERENCE NUMBER WE WISH TO MODIFY

4 READ (1, 4) DTRFN  
FORMAT ('WHICH REFERENCE NUMBER WOULD YOU LIKE TO MODIFY ? ', F8. 0)

```

C      SET UP A LOOP TO READ IN THE REFERENCES ONE AT A TIME
C      RFC IS THE COUNTER USED TO REFERENCE THORUGH THE FILE
C
C      RFC=DTRRF
96     A=DTRFN-RFC
C      IF (A)6,60,6
6      READ(4,7)DTRF
7      FORMAT (F8.0)
C      READ (4,8) (CAT(I), I=1,2)
8      FORMAT (2A6)
C      READ (4,9) (VNAME(I), I=1,5)
9      FORMAT (5A6)
C      READ (4,10) (DKEY(I), I=1,11)
10     FORMAT (11A6)
C
C      WRITE THE REFERENCES WHICH WERE JUST READ
C
C      WRITE (4,7) DTRF
C      WRITE (4,8) (CAT(I), I=1, 2)
C      WRITE (4,9) (VNAME(I), I=1,5)
C
C      WRITE (4,10) (DKEY(I), I=1,11)
C
C      INCREMENT THE REFERENCE COUNTER
C
C      RFC=RFC+1.
C      GO TO 96
60     READ (4,7) DTRF
C      READ (4,8) (CAT(I), I=1,2)
C      READ (4,9) (VNAME(I), I=1,5)
C      READ (4,10) (DKEY(I), I=1,11)
C
C      WRITE OUT THE PRESENT INFORMATION UNDER THE REFERENCE NUMBER
C      IN WHICH WE ARE INTRESTED
C
C      WRITE (1,11)DTRF, DATE1, DATE2, UNAME, (CAT(I), I=1, 2), (VNAME(I), I=1, 5)
11     FORMAT (F8.0,10A6)
C      WRITE (1,12) (DKEY(I), I=1,11)
12     FORMAT (11A6)
C
C      READ THE NEW INFORMATION UNDER THE SAME REFERENCE NUMBER
C
C      WRITE (1,13) DTRF
70     FORMAT ('REFERENCE NUMBER ? ',F8.0)
13     READ (1,14) (CAT(I), I=1,2)
14     FORMAT ('CATEGORIES ? ',2A6)
C      READ (1,15) (VNAME(I), I=1,5)
15     FORMAT ('VENDOR NAME ? ',5A6)
C      READ (1,16) (DKEY(I), I=1,11)
16     FORMAT ('KEY WORDS ? ',11A6)
C      WRITE (1,29)
C
C      IF THE OPERATOR WISHES TO SAVE THE INFORMATION, A 1 IS TYPED,
C      AND THE NEW INFORMATION IS CONSEQUENTLY WRITTEN UNDER THE SAME
C      REFERENCE NUMBER. IF A MISTAKE WAS MADE A 0 IS TYPED, AND THE
C      SAME REFERENCE NUMBER MAY BE ENTERED AGAIN. IF A -1 IS TYPED
C      THE OLD REFERENCE WILL BE KEPT, AND THE PROGRAM WILL TERMINATE

```

```

C
17 READ (1,17) DANS
   FORMAT ('SAVE NEW REFERENCE ? 1=YES, 0=NO ? ', I1)
   IF (DANS)18,70,18
C
C
C
18 WRITE THE NEW REFERENCE INFORMATION ON THE DECTAPE
   WRITE (4,7) DTRF
   WRITE (4,8) (CAT(I), I=1,2)
   WRITE (4,9) (VNAME(I), I=1,5)
   WRITE (4,10) (DKEY(I), I=1,11)
C
C
C
277 SET UP A LOOP TO READ AND WRITE THE REST OF THE REFERENCES
   B=DTLRF-DTRFN-1
   IF (B) 26,23,26
26  READ (4,7) DTRF
   READ (4,8) (CAT(I), I=1,2)
   READ (4,9) (VNAME(I), I=1,5)
   READ (4,10) (DKEY(I), I=1,11)
   WRITE (4,7) DTRF
   WRITE (4,8) (CAT(I), I=1,2)
   WRITE (4,9) (VNAME(I), I=1,5)
   WRITE (4,10) (DKEY(I), I=1,11)
   DTRFN=DTRFN+1
   GO TO 277
C
23 CALL OCLOSE CLOSE CATALOG FILE
C
C
68 WRITE (1,68)
   FORMAT ('WOULD YOU LIKE TO CHANGE ANOTHER REFERENCE ?')
69  READ (1,69) DANS2
   FORMAT ('YES=1, NO=0 ? ', I2)
   IF (DANS2) 71,71,5
C
C
C
71 REWRITE THE HEADER FILE
   CALL OOPEN ('DTR1', 'FILE') OPEN HEADER FILE
   WRITE (4,41) DTID, DTLRF, DTRF, DTNUM, DTNAM, DTDT1, DTDT2
C
   CALL OCLOSE CLOSE HEADER FILE
100 CALL EXIT
   END

```

C SEARCH KEY WORDS, VENDORS, OR CATEGORIES

C  
C THIS PROGRAM SEARCHES FOR KEY CHARACTERS AND ENABLES EASY  
C AND SPEEDY RETRIEVAL OF INFORMATION FOR THE CATALOG SYSTEM

C DIMENSION AND INITIATE VARIABLES

C  
C DIMENSION REF(66), CAT(2), VNAME(5), DKEY(11), TAPE(108)  
W=0.  
X=0.  
Y=0.  
Z=0.

WRITE (1,2)

2 FORMAT ('FOLLOW EACH LINE WITH A CR (CARRIAGE RETURN) !')

READ (1,3) DATE1, DATE2

3 FORMAT ('DATE ? ', 2A6)

READ (1,4) UNAME

4 FORMAT ('USER INITIALS ? ', A6)

C OPEN INPUT AND OUTPUT FROM THE HEADER FILE

HEADER FILE

CALL IOPEN ('DTA1', 'FILE')

CALL OOPEN ('DTA1', 'FILE')

41 READ (4, 41) DTID, DTLRF, DTRFR, DTNUM, DTNAM, DTDT1, DTDT2

FORMAT (F6.2, 2F8.0, 4A6)

WRITE (4, 41) DTID, DTLRF, DTRFR, DTNUM, DTNAM, DTDT1, DTDT2

CALL OCLOSE

C OPEN INPUT AND OUTPUT FROM THE CATALOG FILE

CATALOG FILE

1 CALL IOPEN ('DTA1', 'CATFIL')

CALL OOPEN ('DTA1', 'CATFIL')

C RFC IS THE COUNTER USED TO REFERENCE THROUGH THE FILE

RFC=DTRFR

WRITE (1,17)

100 READ (1,100) DANS1

FORMAT ('WOULD YOU LIKE TO SEARCH A CATEGORIES YES=1, NO=0 ? ', I1)

IF (DANS1) 96, 101, 110

101 READ (1,102) DANS2

102 FORMAT ('WOULD YOU LIKE TO SEARCH A VENDOR ? YES=1, NO=0 ? ', I1)

IF (DANS2) 96, 103, 120

103 READ (1,104) DANS3

104 FORMAT ('WOULD YOU LIKE TO SEARCH A KEY WORD ? YES=1, NO=0 ? ', I1)

IF (DANS3) 96, 96, 130

96 CONTINUE

110 WRITE (1,17)

READ (1,111) (REF(I), I=1,12)

111 FORMAT ('SEARCH FOR CATEGORIES -- ', 12A1)

READ (1,501)L

C SET UP A LOOP TO READ AND WRITE A SINGLE REFERENCE

```

300  A=DTLRF-RFC
      IF(A)200,97,200
200  READ (4,8)DTRF
8     FORMAT(F8.0)
9     READ (4,9) (TAPE(N),N=1,12)
      FORMAT(12A1)
10    READ (4,10) (VNAME(I),I=1,5)
      FORMAT (5A6)
11    READ (4,11) (DKEY(I),I=1,11)
      FORMAT (11A6)
      WRITE(4,8)DTRF
      WRITE(4,9)(TAPE(N),N=1,12)
      WRITE (4,10)(VNAME(I),I=1,5)
      WRITE(4,11) (DKEY(I),I=1,11)
C
C     CHECK EACH NUMBER IN A CHARACTER STRING TO SEE IF IT MATCHES
C     THE CATAGORY WE ARE SEARCHING
C     THIS IS ACCOMPLISHED BY USING SABR LANGUAGE IN CONJUNCTION
C     WITH REGULAR FORTRAN STATEMENTS
C
      N=1
500   I=1
      DO 800 I=1,L
C
C     REF(I) IS THE CATAGORY WE ARE SEARCHING
C
      W=REF(I)
S     TAD  \W
S     CIA
S     DCA  \Z
C
C     TAPE(N) IS THE CATAGORY BEING CHECKED ON THE DECTAPE
C
      X=TAPE(N)
S     TAD  \Z
S     TAD  \X
S     DCA  \Y
      IF (N-12)600,700,600
600   N=N+1
      IF(Y)500,800,500
800   CONTINUE
C
C     IF A MATCH IS FOUND, WRITE OUT THE INFORMATION OF THAT
C     CATAGORY AND LOOP BACK IF THE TAPE IS NOT COMPLETELY READ
C
      WRITE (1,17)
17    FORMAT(/)
      WRITE (1,8) DTRF
      WRITE (1,9)(TAPE(N),N=1,12)
      WRITE (1,10)(VNAME(I),I=1,5)
      WRITE (1,11) (DKEY(I),I=1,11)
700   RFC=RFC+1
      GO TO 300
C
C
120   WRITE (1,17)
      READ (1,121) (REF(I),I=1,30)
121   FORMAT ('SEARCH FOR VENDOR NAME -- ',30A1)

```

```

501 READ (1,501) L
301 FORMAT ('ENTER THE NUMBER OF CHARACTERS JUST TYPED --',12)
A=DTLRF-RFC
IF(A)201,97,201
201 READ (4,8)DTRF
READ(4,81) (CAT(I), I=1,2)
81 FORMAT (2A8)
READ (4,82) (TAPE(N), N=1,30)
82 FORMAT(30A1)
READ (4,11) (DKEY(I), I=1,11)
WRITE (4,8)DTRF
WRITE (4,81) (CAT(I), I=1,2)
WRITE(4,82) (TAPE(N), N=1,30)
WRITE (4,11) (DKEY(I), I=1,11)

C
C
C
C
C
THIS LOOP CHECKS EACH LETTER IN A CHARACTER STRING TO SEE
IF IT MATCHES THE VENDOR NAME WE ARE SEARCHING

N=1
505 I=1
DO 801 I=1,L

C
C
C
REF(I) IS THE VENDOR NAME BEING SEARCHED

S
W=REF(I)
S
TAD \W
S
CIA
S
DCA \Z
C

C
C
TAPE(N) IS THE VENDOR NAME BEING CHECKED ON THE DECTAPE

S
X=TAPE(N)
S
TAD \Z
S
TAD \X
S
DCA \Y

601 IF (N-30)601,701,601
N=N+1
801 IF(Y)505,801,505
CONTINUE
WRITE (1,17)
WRITE (1,8)DTRF
WRITE (1,81) (CAT(I), I=1,2)
WRITE (1,82) (TAPE(N), N=1,30)
WRITE (1,11) (DKEY(I), I=1,11)
701 RFC=RFC+1
GO TO 301

C
C
130 WRITE (1,17)
131 READ (1,131) (REF(I), I=1,66)
FORMAT ('SEARCH FOR KEY WORDS --',66A1)
302 READ (1,501) L
A=DTLRF-RFC
IF(A)202,97,202
202 READ (4,8)DTRF
READ (4,81) (CAT(I), I=1,2)
READ (4,10) (VNAME(I), I=1,5)

```

```

83 READ (4,83)(TAPE(N),N=1,66)
   FORMAT(66A1)
   WRITE (4,8)DTRF
   WRITE (4,91)(CAT(I),I=1,2)
   WRITE (4,10)(VNAME(I),I=1,5)
   WRITE (4,83)(TAPE(N),N=1,66)
C
C
C THIS LOOP CHECKS EACH LETTER IN A CHARACTER STRING TO SEE
C IF IT MATCHES THE KEY WORDS WHICH WE ARE SEARCHING
C
   N=1
504 I=1
   DO 802 I=1,L
C
C REF(I) IS THE KEY WORD WE ARE SEARCHING
C
   W=REF(I)
   TAD = \W
   CIA
   DCA = \Z
C
C TAPE(N) IS THE KEY WORD BEING SEARCHED ON THE DECTAPE
C
   X=TAPE(N)
   TAD = \Z
   TAD = \X
   DCA = \Y
   IF(N-66)602,702,602
602 N=N+1
   IF(Y)504,802,504
802 CONTINUE
   WRITE (1,17)
   WRITE (1,8)DTRF
   WRITE (1,81)(CAT(I),I=1,2)
   WRITE (1,10)(VNAME(I),I=1,5)
   WRITE (1,83)(TAPE(N),N=1,66)
702 RFC=RFC+1
   GO TO 302
C
C CLOSE THE CATALOG FILE
C
97 CALL OCLOSE
C
C
C WRITE (1,17)
98 WRITE (1,12)
12 FORMAT ('WOULD YOU LIKE TO SEARCH ANOTHER ITEM ?')
   READ (1,13) DAN52
13 FORMAT ('TYPE -- YES=1, NO=0 ? ',I1)
   IF(DAN52)14,14,1
C
C OPEN OUTPUT ONTO THE HEADER FILE
C
14 CALL OOPEN ('DTA1','FILE')
   WRITE (4,41) DTID, DTLRF, DTRF, DTNUM, DTNAM, DTDT1, DTDT2
   CALL OCLOSE
C
   CALL EXIT
END
CLOSE CATALOG FILE
HEADER FILE

```

J. R. FORT  
\*WRITE AS/I/O/G

FOLLOW EACH LINE WITH A CR (CARRIAGE RETURN) !  
DATE ? 8-12-74  
USER INITIALS ? PMC

REFERENCE NUMBER ? 1024  
CATEGORIES ? 3-5, 13-7  
VENDOR NAME ? BELL  
KEY WORDS ? TELEPHONES, COMMUNICATIONS

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? 0

REFERENCE NUMBER ? 1024  
CATEGORIES ? 3-6, 13-8  
VENDOR NAME ? BELL  
KEY WORDS ? TELEPHONES, COMMUNICATIONS

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? 1

REFERENCE NUMBER ? 1025  
CATEGORIES ? 12-8  
VENDOR NAME ? KODAC  
KEY WORDS ? FILM, PHOTOGRAPHY INFORMATION

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? 1

REFERENCE NUMBER ? 1026  
CATEGORIES ? 5-7, 6-9  
VENDOR NAME ? ITT  
KEY WORDS ? WOOPS I MADE A MISTAKE

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? 0

REFERENCE NUMBER ? 1026  
CATEGORIES ?  
VENDOR NAME ?  
KEY WORDS ?

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? -1



R FORT  
\*MODIFY. AS/1/0/6

FOLLOW EACH LINE WITH A CR (CARRIAGE RETURN) !  
PRECEED THE DATE WITH TWO SPACES  
DATE ? 8-12-74  
USER INITIALS ? PMC  
THE LAST REFERENCE NUMBER IS 1026.

WHICH REFERENCE NUMBER WOULD YOU LIKE TO MODIFY ? 1001  
1001. 8-12-74 PMC 2-2 ALLEN-BRADLEY  
CONTACTS

REFEREENCE NUMBER ? 1001  
CATEGORIES ? 2-2,7-6,12-8  
VENDOR NAME ? ALLEN-BRADLEY  
KEY WORDS ? CONTACTS, MOTOR STARTERS, RELAYS, TIMERS

SAVE NEW REFERENCE ? 1=YES, 0=NO ? 1

WOULD YOU LIKE TO CHANGE ANOTHER REFERENCE ?  
YES=1, NO=0 ? 1

WHICH REFERENCE NUMBER WOULD YOU LIKE TO MODIFY ? 1013  
1013. 8-12-74 PMC 5-5 GULF  
OIL PRODUCTS

REFEREENCE NUMBER ? 1013.  
CATEGORIES ? 4-7,1-3  
VENDOR NAME ? ESCO  
KEY WORDS ? WOOPS I MADE A MISTAKE

SAVE NEW REFERENCE ? 1=YES, 0=NO ? 0

REFEREENCE NUMBER ? 1013.  
CATEGORIES ? 4-7,1-3  
VENDOR NAME ? ESCO  
KEY WORDS ? ELECTRONICS SUPPLIER

SAVE NEW REFERENCE ? 1=YES, 0=NO ? 1

WOULD YOU LIKE TO CHANGE ANOTHER REFERENCE ?  
YES=1, NO=0 ? 0

J. R. FORT  
+SEARCH. AS/G/I/O

FOLLOW EACH LINE WITH A CR (CARRIAGE RETURN) !  
DATE ? 8-12-74  
USER INITIALS ? PMC

WOULD YOU LIKE TO SEARCH A CATAGORY YES=1, NO=0 ? 1

SEARCH FOR CATAGORY -- 7-5  
ENTER THE NUMBER OF CHARACTERS JUST TYPED -- 3

1007.  
3-3, 7-5, 1-1  
DELCO  
BATERIES, AUTOMOTIVE PARTS

WOULD YOU LIKE TO SEARCH ANOTHER ITEM ?  
TYPE -- YES=1, NO=0 ? 1

WOULD YOU LIKE TO SEARCH A CATAGORY YES=1, NO=0 ? 1

SEARCH FOR CATAGORY -- 1-3  
ENTER THE NUMBER OF CHARACTERS JUST TYPED -- 3

1013.  
4-7, 1-3  
ESCO  
ELECTRONICS SUPPLIER

WOULD YOU LIKE TO SEARCH ANOTHER ITEM ?  
TYPE -- YES=1, NO=0 ? 1

WOULD YOU LIKE TO SEARCH A CATAGORY YES=1, NO=0 ? 0  
WOULD YOU LIKE TO SEARCH A VENDOR ? YES=1, NO=0 ? 1

SEARCH FOR VENDOR NAME -- IBM  
ENTER THE NUMBER OF CHARACTERS JUST TYPED -- 3

1004.  
5-5, 3-5, 12-5  
IBM  
COMPUTERS, TAPE READERS, DISKS, CARD READERS, TELETYPES

WOULD YOU LIKE TO SEARCH ANOTHER ITEM ?  
TYPE -- YES=1, NO=0 ? 1

WOULD YOU LIKE TO SEARCH A CATAGORY YES=1, NO=0 ? 0  
WOULD YOU LIKE TO SEARCH A VENDOR ? YES=1, NO=0 ? 1

SEARCH FOR VENDOR NAME -- TEXACO  
ENTER THE NUMBER OF CHARACTERS JUST TYPED --- 6

WOULD YOU LIKE TO SEARCH ANOTHER ITEM ?  
TYPE -- YES=1, NO=0 ? 1

WOULD YOU LIKE TO SEARCH A CATAGORY YES=1, NO=0 ? 0  
WOULD YOU LIKE TO SEARCH A VENDOR ? YES=1, NO=0 ? 0  
WOULD YOU LIKE TO SEARCH A KEY WORD ? YES=1, NO=0 ? 1

SEARCH FOR KEY WORDS --ELET  
ENTER THE NUMBER OF CHARACTERS JUST TYPED -- 3

1002.

3-3  
PIONEER  
ELECTRICAL EQUIPMENT

1004.

5-5, 3-5, 12-5  
IBM  
COMPUTERS, TAPE READERS, DISKS, CARD READERS, TELETYPE

1008.

3-8, 7-8  
MONARCH MARKETING  
INDUSTRIAL, ELECTRICAL DESIGNS

1013.

4-7, 1-3  
ESCO  
ELECTRONICS SUPPLIER

1016.

9-9, 14-4, 6-3  
FECO  
DIELECTRIC OVENS

1019.  
3-7, 15-7  
MOTOROLA  
TELEVISIONS, ELECTRONICS

1022.  
3-6, 12-7, 16-  
D. P&L  
ELECTRIC POWER, GENERATORS

1024.  
3-6, 13-8  
BELL  
TELEPHONES, COMMUNICATIONS

· WOULD YOU LIKE TO SEARCH ANOTHER ITEM ?  
TYPE -- YES=1, NO=0 ? 0

R WRITE

FOLLOW EACH LINE WITH A CR (CARRIAGE RETURN) !

DATE ? 8-14-74

USER INITIALS ? PMC

REFERENCE NUMBER ? 1029

CATEGORIES ? 4-8,8-1

VENDOR NAME ? DAYTON TIRE

KEY WORDS ? TIRES

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? 1

REFERENCE NUMBER ? 1030

CATEGORIES ? 12-9

VENDOR NAME ? FUSETRON

KEY WORDS ? FUSES, ELECTRONICS

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? 1

REFERENCE NUMBER ? 1031

CATEGORIES ? 3-3, 13-7

VENDOR NAME ? STAEDTLER

KEY WORDS ? PENCILS, DRAWING, STENCILS, WOOPS I MADE A MISTAKE

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? 0

REFERENCE NUMBER ? 1031

CATEGORIES ? 3-3, 13,

VENDOR NAME ?

KEY WORDS ?

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? 0

REFERENCE NUMBER ? 1031

CATEGORIES ? 3-3, 13-7

VENDOR NAME ? STAEDTLER

KEY WORDS ? PENCILS, LEAD, STENCILS, DRAWING

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? 1

REFERENCE NUMBER ? 1032

CATEGORIES ?

VENDOR NAME ?

KEY WORDS ?

SAVE REFERENCE ? TYPE -- 1=YES, 0=NO, -1=EXIT ? -1

R MODIFY

FOLLOW EACH LINE WITH A CR (CARRIAGE RETURN) !

PRECEED THE DATE WITH TWO SPACES

DATE ? 8-14-74

USER INITIALS ? PMC

THE LAST REFERENCE NUMBER IS 1032.

WHICH REFERENCE NUMBER WOULD YOU LIKE TO MODIFY ? 1012

1012 8-14-74 PMC 5-7,7-7 REYNOLDS

METALS, METALLURGICAL PROCESSES

REFERENCE NUMBER ? 1012

CATEGORIES ? 7-8,11-5

VENDOR NAME ? ACRYLITE

KEY WORDS ? PANNELING, FALES FLOORS

SAVE NEW REFERENCE ? 1=YES, 0=NO ? 1

WOULD YOU LIKE TO CHANGE ANOTHER REFERENCE ?

YES=1, NO=0 ? 1

WHICH REFERENCE NUMBER WOULD YOU LIKE TO MODIFY ? 1030

1030 8-14-74 PMC 12-9 FUSETRON

FUSES, ELECTRONICS

REFERENCE NUMBER ? 1030

CATEGORIES ? 5-7,7-7

VENDOR NAME ? REYNOLDS

KEY WORDS ? WOOPS I MADE A MISTAKE

SAVE NEW REFERENCE ? 1=YES, 0=NO ? 0

REFERENCE NUMBER ? 1030

CATEGORIES ? 5-7,7-7

VENDOR NAME ? REYNOLDS

KEY WORDS ? METALS, METALLURGICAL PROCESSES

SAVE NEW REFERENCE ? 1=YES, 0=NO ? 1

WOULD YOU LIKE TO CHANGE ANOTHER REFERENCE ?

YES=1, NO=0 ? 0

R SEARCH

FOLLOW EACH LINE WITH A CR (CARRIAGE RETURN) !

DATE ? 8-14-74

USER INITIALS ? PMC

WOULD YOU LIKE TO SEARCH A CATAGORY YES=1, NO=0 ? 1

SEARCH FOR CATAGORY -- 3-3

ENTER THE NUMBER OF CHARACTERS JUST TYPED -- 3

1002.

3-3

PIONEER

ELECTRICAL EQUIPMENT

1003.

3-3

FENWAL

CONTACTS

1007.

3-3, 7-5, 1-1

DELCO

BATERIES, AUTOMOTIVE PARTS

1031.

3-3, 13-7

STAEDTLER

PENCILS, LEAD, STENCILS, DRAWING

WOULD YOU LIKE TO SEARCH ANOTHER ITEM ?

TYPE -- YES=1, NO=0 ? 1

WOULD YOU LIKE TO SEARCH A CATAGORY YES=1, NO=0 ? 0

WOULD YOU LIKE TO SEARCH A VENDOR ? YES=1, NO=0 ? 1

SEARCH FOR VENDOR NAME -- IBM

ENTER THE NUMBER OF CHARACTERS JUST TYPED -- 3

1004.

5-5, 3-5, 12-5

IBM

COMPUTERS, TAPE READERS, DISKS, CARD READERS, TELETYPES

WOULD YOU LIKE TO SEARCH ANOTHER ITEM ?  
TYPE -- YES=1, NO=0 ? 1

WOULD YOU LIKE TO SEARCH A CATAGORY YES=1, NO=0 ? 0  
WOULD YOU LIKE TO SEARCH A VENDOR ? YES=1, NO=0 ? 0

WOULD YOU LIKE TO SEARCH A KEY WORD ? YES=1, NO=0 ? 1

SEARCH FOR KEY WORDS --METALLURG  
ENTER THE NUMBER OF CHARACTERS JUST TYPED -- 9

1030.

5-7, 7-7

REYNOLDS

METALS, METALLURGICAL PROCESSES

WOULD YOU LIKE TO SEARCH ANOTHER ITEM ?  
TYPE -- YES=1, NO=0 ? 0