URI986_59

1986/59. ELSORT - A program for searching Exploration Licence report numbers.

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Abstract

The program described is used for sorting lists of Exploration Licence report numbers into ascending order to simplify typing of index cards.

USING THE PROGRAM

The program (Appendix 1) is run on the Department of Mines Perkin-Elmer mini-computer by typing ELSORT. The program prompts for a card title, followed by a series of requests for report numbers. If END is typed in response to the card title prompt the program terminates, and if END is typed in response to the report number prompt the report numbers for that card are sorted into ascending order. The report numbers should be entered as a two digit year code followed by a - and then a maximum of four numeric characters and two alphabetic characters. Valid numbers include:

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54-27
54-027
54-27A
54-27A  R
54-1234A  R
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[12 September 1986]

APPENDIX 1

Program ELSORT

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C ELSORT.FTN - FOR SORTING EL REPORT NUMBERS
C ASSUMES NUMBERS OF THE FORM 56-1234 WITH OPTIONAL NON-NUMERIC AFTER
C THE NUMBERS
C LU  5  INPUT AND PROMPTS
C LU  6  OUTPUT OF INPUT AND SORTED LISTS
      CHARACTER*72 TITLE
      CHARACTER*11 ELNUM(400),REGNO
      CHARACTER*12 BUFF
      EQUIVALENCE (TITLE,ELNUM(1))
   12 CONTINUE
      WRITE(5,100)
  100 FORMAT(' CARD TITLE? - END TO FINISH RUN')
      READ(5,101) TITLE
  101 FORMAT(A72)
      IF (TITLE(1:6) .EQ. 'END   ') GOTO 18
C AT END OF RUN
      WRITE(6,200) TITLE
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  200 FORMAT(1X,A72)
      N=1
C COUNTER FOR NUMBER OF REPORTS
   14 CONTINUE
      WRITE(5,102)
  102 FORMAT(' REPORT NO? - END TO FINISH CARD')
      READ(5,103) REGNO
  103 FORMAT(A11)
      IF (REGNO(1:6) .EQ. 'END   ') GOTO 15
C READY TO SORT
      DO 17 I=1,10
      IF (REGNO(I:I) .LT. ' ') REGNO(I:I)=' '
   17 CONTINUE
C CHECK FOR NON-PRINTING CHARACTERS
      DO 210 I=1,10
      IF (REGNO(I:I) .GE. '0' .AND. REGNO(I:I) .LE. '9') GOTO 211
C FIND THE FIRST NUMERIC CHARACTER
  210 CONTINUE
  211 ELNUM(N)(1:11)='           '
C FILL WITH BLANKS
C KNOW THAT FIRST TWO CHARACTERS WILL BE YEAR CODE
      ELNUM(N)(2:3)=REGNO(I:I+1)
      ELNUM(N)(4:4)='-'
C NOW PUT IN THE MINUS
      K=5
C COUNTER FOR POSITION IN ELNUM
C
C
C   NOW LOOK FOR THE NEXT NUMERIC CHARACTER
      I=I+2
C SKIP PAST THE YEAR CODE
      DO 212 J=I,11
      IF (REGNO(J:J) .GE. '0' .AND. REGNO(J:J) .LE. '9') GOTO 213
C FOUND THE NEX NUMERIC CHARACTER
  212 CONTINUE
C
  213 CONTINUE
C J IS THE START OF THE NUMBER
      DO 214 J1=J+1,11
      IF (REGNO(J1:J1) .LT. '0' .OR. REGNO(J1:J1) .GT. '9') GOTO 215
C LOOK FOR THE NEXT NON-NUMERIC
  214 CONTINUE
C
  215 ITMP=CTOI(REGNO(J:J1-1),J2)
C CONVERT TO INTEGER
      WRITE(BUFF,300) ITMP
  300 FORMAT(I4)
C WRITE INTO BUFFER
      READ(BUFF,301) ELNUM(N)(K:K+3)
  301 FORMAT(A4)
C READ BACK IN WITH LEADING SPACES
      K=K+4
C NOW WANT TO COPY ANY ALPHA-NUMERICS
C HAVE (11-J1)+1 CHARS LEFT
      ELNUM(N)(K:K+(11-J1))=REGNO(J1:11)
C COPIED ACROSS
C NOW IN FORMAT 1X,I2,A1,I4,A3
C
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```
        N=N+1
        GOTO 14
C BACK ROUND ON SAME CARD
C
   15 N=N-1
        WRITE(6,201)
  201 FORMAT(' INPUT ORDER')
        WRITE(6,202) (ELNUM(I),I=1,N)
  202 FORMAT(1X,A11)
        WRITE(6,203)
  203 FORMAT(' SORTED')
        CALL BBSSTR(ELNUM,N)
        DO 16 I=1,N
        WRITE(6,202) ELNUM(I)
   16 CONTINUE
        WRITE(6,204)
  204 FORMAT(//)
C SPACE AT END OF CARD
        GOTO 12
C SEE IF MORE DATA
C
   18 WRITE(6,204)
C BLANK LINE AT END
        STOP
        END
        SUBROUTINE BBSSTR(CVAR,N)
C SORT A NUMBER OF STRINGS INTO ASCENDING ORDER
        CHARACTER *11 CVAR(N),CTEMP
        LOGICAL NSWAP
        IF (N .LE. 1) RETURN
C NOTHING TO SORT
        NM1=N-1
        DO 30 J=1,NM1
        NSWAP=.TRUE.
        IRI=1
        DO 40 I=1,NM1
        IP1=I+1
        IF (CVAR(IRI) .LE. CVAR(IP1)) GOTO 40
        NSWAP=.FALSE.
        CTEMP=CVAR(IRI)
        CVAR(IRI)=CVAR(IP1)
        CVAR(IP1)=CTEMP
   40 IRI=IP1
        IF (NSWAP) RETURN
   30 CONTINUE
        RETURN
        END


    *ELSORT.CSS - to run ELSORT for sorting EL report numbers
    L ELSORT;  AS 5, CON:; AS 6, PR:; ST
    $EXIT
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