```
* RUNOFF.S -- Small Runoff transcribed by C. R. Britten; Dec 6, 1981
        BEGIN RUNOFF;
3
           START MAIN:
4
           EXT PROC READ, PROC WRITE, PROC ATTACH, PROC CLOSE;
5
6
           EXT PROC STREQ, PROC ERROR;
7
           EXT PROC SPACE, PROC BRK, PROC COMMAND, PROC PROCTEXT;
8
          ENT INFILE, INBUF;
9
10
           ENT OUTFILE, OUTBUF;
          ENT TRUE, FALSE, NULL;
11
          ENT CEVAL, INVAL, LSVAL;
12
13
          ENT MIVAL, M2VAL, M3VAL, M4VAL;
14
          ENT PLVAL, PPVAL, RMVAL, TIVAL, ULVAL;
          ENT HEAD, FOOT;
15
16
          ENT FILLVAL, JUSTVAL;
17
          ENT WRDBUF, WRDLEN, OUTWRDS;
18
          ENT CURPAG, NEWPAG;
19
          ENT TTY, PSEUDO, LINENO, LSVAL, INVAL;
20
          ENT BOTTOM, MLINEW, DIRRT, NEXTRA;
          ENT OUTP, OUTW;
21
22
          ENT INIT;
23
24
          SET LINEL=132;
                                           * Max length of output line
25
          SET LINER=255;
                                           * Max length of input line
26
          SET LINEW=3*LINEL;
                                           * Max length with underlines
27
28
           DCL INBUF(LINER);
                                           * Current input line
29
          DCL HEAD(LINER), FOOT(LINER);
                                           * Header and footer lines
          DCL INFNAME(14), OUTFNAME(14); * Input and output fllenames
30
31
          DCL INFILE=1, OUTFILE=2;
                                           * File unit numbers
32
          DCL INBLK(82), OUTBLK(82);
                                           * File blocks for CP/M
33
          DCL OUTBUF(LINEW), WRDBUF(LINEW);
34
          DCL BLANKS(LINER):
35
36
          DCL CURPAG, NEWPAG, LINENO;
37
          DCL PLVAL, M1VAL, M2VAL, M3VAL, M4VAL;
38
          DCL LSVAL, INVAL, RMVAL, TIVAL;
39
          DCL CEVAL, ULVAL, BOTTOM, PPVAL;
40
          DCL OUTP, OUTW, OUTWRDS, WRDLEN;
41
          DCL FILLVAL, JUSTVAL, DIRRT;
42
          DCL NEXTRA!
43
44
          DCL TRUE=-1, FALSE=0;
45
          DCL NULL=0;
          DCL PSEUDO=35;
46
                                           * Pseudo blank is pound sign
47
          DCL MAX=999;
48
          DCL MLINER=LINER;
49
          DCL MLINEW#LINEW;
50
51
          MSG HEADMSG= Small Runoff Dec 6 1981 ;
          MSG INFMSG='Input Filename ';
52
53
          MSG OUTFMSG#!Output Filename !!
54
          MSG ERRMSG= Cannot Output to same file ;
55
          DCL TTY#10;
          DCL I, ISTAT;
56
                                           * Input Status
57
58
        LABEL MAIN:
59
          CALL WRITE (TTY, HEADMSG);
                                           * Hello, who am I
60
          CALL WRITE(TTY, INFMSG);
                                           * Ask for input filename
```

```
* Get it
           ISTAT=READ(TTY, INFNAME);
61
           CALL ATTACH(INFILE, INFNAME, INBUK);
62
                                             * Ask for output filaname
           CALL WRITE(TTY, OUTFMSG);
63
           ISTAT=READ(TTY, OUTFNAME);
                                             * Get it
64
           IF STREQ(INFNAME, OUTFNAME);
65
                                             * Error if same
             THEN CALL ERROR (ERRMSG);
66
      1
             ELSE
67
      1
                CALL ATTACH (OUTFILE, OUTFNAME, OUTBLK);
68
      1
                CALL INIT;
69
      1
70
                DO WHILE ISTAT?
      1
                  ISTAT=READ(INFILE, INBUF);
      2
71
                  IF INBUF EQ 0;
72
                    THEN CALL PROCTEXT;
      3
73
74
                    ELSE
      3
                       IF INBUF(1) EQ ...;
75
      3
                         THEN CALL COMMAND;
      4
76
                         ELSE CALL PROCTEXT;
77
      4
                         ENDIF
      4
78
79
      3
                    ENDIF
80
      2
                  ENDDO
81
      1
                CALL BRK:
                CALL SPACE (MAX);
82
      1
                CALL CLOSE (OUTFILE);
83
      1
84
      1
              ENDIF
85
      0
           STOP
86
      0
      0
         PROC INIT;
87
88
      1
           I=1;
89
      1
           DO WHILE I LE MLINER!
              BLANKS(I)=' ';
90
      2
91
      2
              I=I+1;
      2
92
              ENDDO
93
            BLANKS=MLINER;
      1
94
      1
            HEAD=NULL;
95
      1
            FOOT=NULL:
96
      1
            FILLVAL TRUE;
            JUSTVAL=TRUE:
97
      1
98
            CURPAG#0;
      1
99
      1
            NEWPAG=1;
100
            LINENO=0:
      1
                                              * Page length
101
      1
            PLVAL=66:
102
      1
            M1VAL#21
103
      1
            M2VAL=1;
104
            M3VAL=1:
      1
105
            M4VAL=2;
      1
            BOTTOM=PLVAL-M3VAL-M4VAL;
106
      1
107
      1
            INVAL=0;
            LSVAL=1;
108
      1
                                              * Right margin
            RMVAL=72;
109
      1
            TIVAL=0;
      1
 110
111
      1
            CEVAL=0;
            ULVAL=0:
112
      1
                                              * Paragraph indent
            PPVAL=5;
 113
      1
            OUTP#0;
      1
 114
115
      1
            OUTW=0;
            OUTWRDS=0;
 116
      1
            DIRRT=FALSE;
 117
      1
            ISTAT=TRUE;
 118
      1
 119
      1
            RETURN
            ENDPROC
 120
      1
```

121 0 \*-----122 0 END NO ERRORS DETECTED