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1 IDENTIFICATION DIVISION.
2 PROGRAM-ID. ROMANNUMERALS.
3 ENVIRONMENT DIVISION.
4 INPUT-OUTPUT SECTION.
5 FILE-CONTROL.
6     SELECT STANDARD-INPUT ASSIGN TO KEYBOARD.
7     SELECT STANDARD-OUTPUT ASSIGN TO DISPLAY.
8
9 DATA DIVISION.
10 FILE SECTION.
11 FD STANDARD-INPUT.
12     01 STDIN-RECORD    PICTURE X(80).
13 FD STANDARD-OUTPUT.
14     01 STDOUT-RECORD   PICTURE X(80).
15 WORKING-STORAGE SECTION.
16 77 N    PICTURE S99 USAGE IS COMPUTATIONAL.
17 77 TEMP PICTURE S9(8) USAGE IS COMPUTATIONAL.
18 77 RET  PICTURE S9 USAGE IS COMPUTATIONAL-3.
19 01 ARRAY-AREA.
20     02 R PICTURE X(1) OCCURS 30 TIMES.
21 01 INPUT-AREA.
22     02 IN-R    PICTURE X(1).
23     02 FILLER  PICTURE X(79).
24 01 TITLE-LINE.
25     02 FILLER PICTURE X(11) VALUE SPACES.
26     02 FILLER PICTURE X(24) VALUE 'ROMAN NUMBER EQUIVALENTS'.
27 01 UNDERLINE-1.
28     02 FILLER PICTURE X(45) VALUE
29         ' ----- '.
30 01 COL-HEADS.
31     02 FILLER PICTURE X(9) VALUE SPACES.
32     02 FILLER PICTURE X(12) VALUE 'ROMAN NUMBER'.
33     02 FILLER PICTURE X(13) VALUE SPACES.
34     02 FILLER PICTURE X(11) VALUE 'DEC. EQUIV.'.
35 01 UNDERLINE-2.
36     02 FILLER PICTURE X(45) VALUE
37         ' ----- ' .
38 01 PRINT-LINE.
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39      02 FILLER PICTURE X VALUE SPACE.
40      02 OUT-R  PICTURE X(30).
41      02 FILLER PICTURE X(3) VALUE SPACES.
42      02 OUT-EQ PICTURE Z(9).
43
44  PROCEDURE DIVISION.
45      OPEN INPUT STANDARD-INPUT, OUTPUT STANDARD-OUTPUT.
46      WRITE STDOUT-RECORD FROM TITLE-LINE AFTER ADVANCING 0 LINES.
47      WRITE STDOUT-RECORD FROM UNDERLINE-1 AFTER ADVANCING 1 LINE.
48      WRITE STDOUT-RECORD FROM COL-HEADS AFTER ADVANCING 1 LINE.
49      WRITE STDOUT-RECORD FROM UNDERLINE-2 AFTER ADVANCING 1 LINE.
50  L1.  MOVE 1 TO N. MOVE SPACES TO ARRAY-AREA.
51  L2.  READ STANDARD-INPUT INTO INPUT-AREA AT END GO TO B3.
52      MOVE IN-R TO R(N).
53      IF IN-R IS EQUAL TO SPACE GO TO B1.
54      ADD 1 TO N. GO TO L2.
55  B1.  SUBTRACT 1 FROM N.
56      CALL "conv" USING ARRAY-AREA, N, RET, TEMP.
57      MOVE 1 TO RET.
58      GO TO B2, L1 DEPENDING ON RET.
59  B2.  MOVE TEMP TO OUT-EQ. MOVE ARRAY-AREA TO OUT-R.
60      WRITE STDOUT-RECORD FROM PRINT-LINE AFTER ADVANCING 1 LINE.
61      GO TO L1.
62  B3.  CLOSE STANDARD-INPUT, STANDARD-OUTPUT.
63      STOP RUN.
64
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