

```

50 PRINT NUM; "RSHIFTED"; P; "IS";
60 TEMP = RSHIFT(NUM,P) : GOSUB 200
70 PRINT NUM; "LSHIFTED"; P; "IS";
80 TEMP = LSHIFT(NUM,P) : GOSUB 200
90 PRINT NUM; "ROTATED "; P; "IS";
100 TEMP = ROTATE(NUM,P) : GOSUB 200
110 PRINT
120 GOTO 10
200 REM SUBROUTINE TO CONVERT TEMP TO BINARY
210 FOR I = 15 TO 0 STEP -1
220 PRINT TEST(TEMP,I);
230 NEXT I
240 PRINT
250 RETURN
RUN
NUMBER TO BE SHIFTED? 1
NUMBER OF PLACES? 2
1      IS      0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
1 RSHIFTED 2 IS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 LSHIFTED 2 IS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0
1 ROTATED  2 IS 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

NUMBER TO BE SHIFTED? 400
NUMBER OF PLACES? 9
400      IS      0 0 0 0 0 0 0 0 0 0 1 1 0 0 1 0 0 0 0
400 RSHIFTED 9 IS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
400 LSHIFTED 9 IS 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
400 ROTATED  9 IS 1 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0

NUMBER TO BE SHIFTED? #FF
NUMBER OF PLACES? 3
255      IS      0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1
255 RSHIFTED 3 IS 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1
255 LSHIFTED 3 IS 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 0 0 0 0
255 ROTATED  3 IS 1 1 1 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1

NUMBER TO BE SHIFTED? ^C
BREAK AT LINE 10
OK

```

The next example uses RSHIFT to print the hexadecimal representation of a number. One digit of the hex representation is PRINTed each time the subroutine at line 100 is called.

```

NEW
OK
10 INPUT "NUMBER TO CONVERT" N
20 PRINT N; "IN HEX IS ";
30 FOR I = 12 TO 0 STEP -4
40 GOSUB 100
50 NEXT I
60 PRINT
70 GOTO 10
100 DIGIT = RSHIFT (N,I) AND #F
110 IF DIGIT < 10 THEN PRINT CHR$(48 + DIGIT);
120 IF DIGIT >= 10 THEN PRINT CHR$(55 + DIGIT);
130 RETURN

```