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NEW
OK
10 REM PROGRAM TO PRINT SQUARES OF NUMBERS
20 LET I = 1 'INITIALIZE COUNTER TO 1
30 IF I > 10 THEN 70 'DONE AFTER 10
40 PRINT "THE SQUARE OF"; I; "IS"; I*I
50 LET I = I + 1 'INCREMENT COUNTER
60 GOTO 30 'TRY NEXT VALUE
70 END

```

```

RUN
THE SQUARE OF 1 IS 1
THE SQUARE OF 2 IS 4
THE SQUARE OF 3 IS 9
THE SQUARE OF 4 IS 16
THE SQUARE OF 5 IS 25
THE SQUARE OF 6 IS 36
THE SQUARE OF 7 IS 49
THE SQUARE OF 8 IS 64
THE SQUARE OF 9 IS 81
THE SQUARE OF 10 IS 100
OK

```

This program just PRINTS the squares of numbers between 1 and 10. Line 20 sets I to 1, and the IF command in line 30 tests whether I is greater than 10; execution ENDS at line 70 if it is. Line 40 PRINTs the desired information, line 50 increments I, and the GOTO of line 60 defines the loop. The same program can be written in a simpler and clearer way using FOR and NEXT:

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NEW
OK
10 REM PROGRAM TO PRINT SQUARES OF NUMBERS
20 FOR I=1 TO 10
40 PRINT "THE SQUARE OF"; I; "IS"; I*I
60 NEXT I
70 END

```

```

RUN
THE SQUARE OF 1 IS 1
THE SQUARE OF 2 IS 4
THE SQUARE OF 3 IS 9
THE SQUARE OF 4 IS 16
THE SQUARE OF 5 IS 25
THE SQUARE OF 6 IS 36
THE SQUARE OF 7 IS 49
THE SQUARE OF 8 IS 64
THE SQUARE OF 9 IS 81
THE SQUARE OF 10 IS 100
OK

```

Here the FOR command of line 20 first sets I to 1, and then tests whether I is less than or equal to 10. Since it is, the command in line 40 is executed. The NEXT command in line 60 then increments I by 1 and again tests whether I is less than or equal to 10. If it is, the command after the FOR is executed (namely, line 40); if not, the command after the NEXT is executed (namely, line 70). You should notice that this program does the same thing as the previous example, but without using IF / THEN or GOTO.