

A conditional expression always follows the CASE command. If the condition is true, the statement(s) between it and the & symbol are executed and the program skips down to the statement immediately following CASE END.

If the first condition is false, the program jumps to the & symbol and checks the condition following it. If that condition is true, the statement(s) between it and the next & are executed, and the program jumps to the statement immediately following CASE END. If the second condition is false, the program skips to the next & symbol, and repeats the process. In the above format, only two & conditions are shown. You may use as many as you want.

The CASE ELSE and statement(s) following it are optional. If all the previous conditional expressions are false, the program will execute the statement(s) immediately following CASE ELSE (if it is present); if it is not present, the program jumps to the statement immediately following CASE END. The following example shows how to use the CASE command to determine the number of days in a specified month:

```
10 CASE MONTH%=2%
20   DAYS%=28%
30 & MONTH%=4% OR MONTH%=6% OR MONTH%=9% OR MONTH%=11%
40   DAYS%=30%
50 CASE ELSE
60   DAYS%=31%
70 CASE END
```

Advanced Topics: (Programmers with limited experience should probably move on to the next chapter.)

IF THEN, IF DO, and CASE commands can be nested. For instance, you can use an IF THEN within an IF THEN, an IF DO or a CASE. The one requirement for IF THEN is that everything must fit into one line. Here is an example of an IF THEN within an IF THEN:

```
10 IF T%>2% THEN IF Y%>2% THEN 100 ELSE 200
```

Note that if there are two IF'S and only one ELSE, the ELSE goes with the nearest preceding IF. In the above example, ELSE goes with the IF Y%>2%. If there had been another ELSE at the end of the line, however, you would have gotten a syntax error. An ELSE may refer only to the nearest preceding IF.

If T% is less than or equal to 2%, the program goes to the next line. If T% is greater than 2% and Y% is greater than 2%, the program goes to line 100. If T% is greater than 2%, but Y% is not greater than 2%, the program goes to 200. Here is another example:

```
10 IF T%>2% THEN 100 ELSE IF Y%>2% THEN 200 ELSE 300
```

If T% is greater than 2%, the program goes to 100. If T% is not greater than 2%, but Y% is greater than 2%, the program goes to 200. If neither T% nor Y% are greater than 2%, the program goes to 300.

When the program evaluates a conditional expression, it returns an integer equal to one if the expression is true and zero if it is false. You can sometimes use this fact to your advantage. Suppose you want to add 5 to T%