As the comments indicate, the `spaces++` statement is executed only when `ch` is a space. Because it is outside the `if` statement, the `total++` statement is executed every loop cycle. Note that the total count includes the newline character generated by pressing Enter.

**The if else Statement**

While the `if` statement lets a program decide whether a particular statement or block is executed, the `if else` statement lets a program decide which of two statements or blocks is executed. It's an invaluable statement for creating alternative courses of action. The C++ `if else` is modeled after simple English, as in "If you have a Captain Cookie card, you get a Cookie Plus Plus, else you just get a Cookie d'Ordinaire." The `if else` statement has this general form:

```c++
if (test-condition)
    statement1
else
    statement2
```

If `test-condition` is true or nonzero, the program executes `statement1` and skips over `statement2`. Otherwise, when `test-condition` is false or zero, the program skips `statement1` and executes `statement2` instead. So the code fragment

```c++
if (answer == 1492)
    cout << "That's right!\n";
else
    cout << "You'd better review Chapter 1 again.\n";
```

prints the first message if `answer` is 1492 and prints the second message otherwise. Each statement can be either a single statement or a statement block delimited by braces. (See Figure 6.2.) The entire `if else` construct counts syntactically as a single statement.

**Figure 6.2. The if else statement.**