✔ The #include <stdlib.h> part is necessary because the program uses the atoi() function.

✔ The if command is followed by parentheses, which contain the comparison that the if keyword tests.

✔ The comparison that if makes tests the value of the variable number with 5. The < symbol between them means "less than." The test reads "If the value of the variable number is less than 5." If this is true, the cluster of statements following the if keyword is executed. If the test proves false, the cluster of statements is skipped.

✔ Remember the < — less than — from school? Good!

✔ Notice that the if test isn't followed by a semicolon! Instead, it's followed by a statement enclosed in curly braces. The statements (there can be more than one) "belong" to the if command and are executed only *if* the condition is true.

✔ If you see only the line The genie knows all, sees all!, you probably typed a number greater than 4 (which includes 5 and higher). The reason is that the if statement tests only for values *less than* 5. If the value is less than 5, That number is less than 5! is displayed. The next section elaborates on how it all works.

✔ No, the computer genie doesn't know all and see all if you type a number 5 or greater.

✔ Did you notice the extra set of curly braces in the middle of this program? That's part of how the if statement works. Also notice how they're indented.

The if keyword, up close and impersonal

It's unlike any other C language word you have seen. The if keyword has a unique format, with plenty of options and room for goofing things up. Yet, it's a handy and powerful thing that you can put in your programs — something you use a lot.

The if keyword is used to make decisions in your programs. It makes a comparison. If the result is true, the rest of the if statement is executed. If the comparison isn't true, the program skips over the rest of the if statement, as shown in Figure 12-1.

The if statement is a statement "block" that can look like this:

```
if(comparison)
{
    statement;
    [statement;...]
}
```