You're changing all the if statements into a switch-case thing. Be careful what you type. When you're done, double-check Lines 19 through 37 in the source code to make sure that you got it right. (The first few lines of the program don't change.)

Compile. Fix any errors or typos. Note that those are colons — not semicolons — on the case lines. The character constants are enclosed in single quotes. The word *default* also ends in a colon.

Run. You should see no difference in the output. Internally, however, you have converted an ugly string of if-else statements into an elegant decision-making structure: the switch-case loop (or "structure thing").

- Detailed information on what happens in a switch-case loop is covered in the next section.
- The switch command in Line 19 takes the single character typed at the keyboard (from Line 18) and tells the various case statements in its curly braces to find a match.
- Each of the case statements (Lines 21, 24, 27, and 30) compares its character constant with the value of variable c. If there's a match, the statements belonging to that case are executed.
- The break in each case statement tells the compiler that the switchcase thing is done and to skip the rest of the statements.
- If the break is missing, execution falls through to the next group of case statements, which are then executed, no matter what. Watch out for that! Missing breaks are the bane of switch-case loops.
- The final item in the switch-case thing is default. It's the option that gets executed if no match occurs.

The Old switch-case Trick

This is one booger of a command to try to become comfy with. Although switch-case things are important, they contain lots of programming finesse that many beginners stumble over. My advice is to work through the programs in this chapter to get a feel for things and then check mark bullets in this section for review purposes or to figure out what went wrong when things don't work.

The switch keyword is used to give your programs an easy way to make multiple-choice guesses. It should replace any long repetition of if-else statements you're using to make a series of comparisons.

