A second format is used whenever you want to include a header file that you make yourself or whenever you're using a header file not found in the compiler's INCLUDE directory:

#include "filename"

The format is essentially the same except that the *filename* is enclosed in double quotes rather than in angle brackets. The compiler looks for that header file in the same directory as your source code file.

- ✓ Header files are necessary to help the compiler properly create your programs. Remember that the C language contains only some 32 keywords (see Table 3-1, in Chapter 3). Everything else printf and getchar, for example is a function. Those functions are prototyped in the various header files you include at the beginning of your programs. Without the header files, the compiler doesn't recognize the functions and may display oodles of error messages.
- ✓ The .H part of the filename means *header*.
- ✓ You know when to use a certain header file by looking up a function in your C language library reference. The header file is listed along with the format for the function that needs it.
- ✓ Always use lowercase when you're writing out an include directive. Remember that it doesn't end in a semicolon and that the angle brackets are required around the header filename.
- ✓ You need to specify a header file only once, even if two different functions require it.
- ✓ You probably have seen the effects of including a header file with some compilers. For example, the compiler may report "435 lines compiled" when your source code is only 20 or 30 lines long. Those extra lines come from the #include file (or files).
- ✓ A complete path to the header file isn't necessary. That's because the compiler knows where to find them. Header files are located in a special subdirectory installed on your hard disk with your C compiler. The subdirectory is named INCLUDE, and it contains all the *.H files that came with your compiler. They're all text files, and you can look at them by using a file viewer or your editor. (Please don't change them!)
- ✓ In Windows, the INCLUDE folder is found beneath the folder where your compiler was installed.
- ✓ In Unix-like operating systems, the INCLUDE folder is found in the /usr directory: /usr/include.





