■ Temporarily disabling code that contains comments. We can't use a /*...*/
comment to "comment out" code that already contains /*...*/ comments.
Instead, we can use an #if directive:

#if 0
Lines containing comments
#endif

Q&A

Disabling code in this way is often called "conditioning out."

Section 15.2 discusses another common use of conditional compilation: protecting header files against multiple inclusion.

14.5 Miscellaneous Directives

To end the chapter, we'll take a brief look at the #error, #line, and #pragma directives. These directives are more specialized than the ones we've already examined, and they're used much less frequently.

The #error Directive

The #error directive has the form

#error directive

#error message

where *message* is any sequence of tokens. If the preprocessor encounters an #error directive, it prints an error message which must include *message*. The exact form of the error message can vary from one compiler to another; it might be something like

Error directive: message

or perhaps just

#error message

Encountering an #error directive indicates a serious flaw in the program; some compilers immediately terminate compilation without attempting to find other errors.

#error directives are frequently used in conjunction with conditional compilation to check for situations that shouldn't arise during a normal compilation. For example, suppose that we want to ensure that a program can't be compiled on a machine whose int type isn't capable of storing numbers up to 100,000. The largest possible int value is represented by the INT_MAX macro, so all we need do is invoke an #error directive if INT_MAX isn't at least 100,000:

INT_MAX macro ►23.2