



- ✓ The best time for using the `TRUE` or `FALSE` shortcut words is when you create a `while` loop. Refer to Chapters 17 and 18.
- ✓ In the C language, the value 1 is taken to be `TRUE`, and 0 is `FALSE`.
- ✓ Some C programmers prefer to define `TRUE` and `FALSE` this way:

```
#define FALSE 0
#define TRUE(!FALSE)
```

Whatever. This book defines `TRUE` as 1 and `FALSE` as “not true,” which works out to 0. If you see the preceding `#defines` in a program, everything still works as advertised. Just don’t let it throw you.

- ✓ Some compilers may issue a warning message when no comparison is in the `if` statement’s parentheses. That’s just the compiler being smart again; it recognizes the certainty of the `if` keyword’s “comparison” and tells you whether it is always `TRUE` or is always `FALSE`.
- ✓ Some compilers may also point out that the second `if` statements are never executed because the `if` condition is always false. Big deal. Run the program anyway.

Avoiding the Topic of Macros



Another `#` thing used in the C language is the *macro*. Like `#include` and `#define`, macros are instructions to the compiler that tell it how to handle conditions and whether specific parts of the source code are to be used or skipped. Weird, but handy.

Though there’s no reason to describe in detail what macros are and because I’m not crazy enough to waste time with an example, you may see even more pound-sign goobers playing the macro game in someone else’s C source code. Pick any from this list:

- ✓ `#if`
- ✓ `#else`
- ✓ `#endif`
- ✓ `#ifdef`
- ✓ `#ifndef`

These are also instructions to the C compiler, designed primarily to indicate whether a group of statements should be compiled or included with the final program.