

## **Silly formatting trivia**

The if-else structure need not be heavyladen with curly braces. Just as you can abbreviate an if statement to one line, you can also abbreviate else. I don't recommend it, which is why I'm terribly brief and don't ever show a program that illustrates examples this crudely:

```
if(tax1>tax2)
{
    printf("You owe $%i in
    taxes.\n",tax1*10);
}
else
{
    printf("You owe $%i in
    taxes.\n",tax2*10);
}
```

In this example, you see the meat and potatoes of the TAXES.C program: the if-else structure. Because both if and else have only one statement belonging to them, you can abbreviate the source code this way:

```
if(tax1>tax2)
    printf("You owe $%i in
    taxes.\n",tax1*10);
else
    printf("You owe $%i in
    taxes.\n",tax2*10);
```

This format keeps the indenting intact, which is one way to see what belongs to what (and also to easily identify the <code>if-else</code> structure). The following format is also possible, though it makes the program hard to read:

```
if(tax1>tax2) printf("You owe
    $%i in taxes.\n",tax1*10);
else printf("You owe $%i in
    taxes.\n".tax2*10);
```

Everything is scrunched up on two lines; the if statement has its own line, and the else has its own line. Both lines end with a semicolon, which is how this works as two statements in the C language. But, look-it. It's gross! Please don't write your programs this way.

You can do this trick — eliminating the curly braces — whenever only one statement appears with an if or else keyword. If multiple statements must be executed, you're required by law to use the curly braces. That's why I recommend them all the time: No sense risking prison over brevity. To wit:

```
if(tax1>tax2)
    printf("You owe $%i in
    taxes.\n",tax1*10);
else
{
    printf("You owe $%i in
    taxes.\n",tax2*10);
    printf("It pays to live
    where it's cold!\n");
}
```

Because two printf statements belong to the preceding else, the curly braces are required.

Either-or conditions are the daily bread of the if-else duo. Either way, one set of statements is executed and not the other, depending on the comparison made by if.

What about "one, two, or the third" types of decisions? For them, you need the miraculous and overly versatile else-if combination. It really drives you batty, but it's handy.