Single-character variables

Like a string of text, the single-character variable is declared by using the `char` keyword. Unlike a string, the single-character variable holds only one character — no more. In a way, the character variable is like a padded cell. The string variable is merely several padded cells one after the other — like an asylum.

The `char` keyword is used to set aside storage space for a single-character variable. Here's the format:

```
char var;
```

`char` is written in lowercase, followed by a space and then *var,* the name of the variable to be created.

In the following format, you can predefine a single-character value:

```
char var='c';
```

Typing those hard-to-reach characters

Some characters can't be typed at the keyboard or entered by using escape sequences. For example, the extended ASCII characters used on most PCs — which include the line-drawing characters, math symbols, and some foreign characters — require some extra effort to stuff into character variables. It's possible — just a little technical. Follow these steps:

1. Look up the character's secret code value — its ASCII or extended ASCII code number.

2. Convert that code number into base 16, the hexadecimal, or "hex," system. (That's why hexadecimal values are usually shown in the ASCII tables and charts.)

3. Specify that hex value, which is two digits long, after the `\x` escape sequence.

4. Remember to enclose the entire escape sequence — four characters long — in single quotes.

Suppose that you want to use the British pound symbol, £, in your program. That character's secret code number is 156. Look it up in Appendix B. You can see that the hexadecimal value is 9C. (Hex numbers contain letters.) So you specify the following escape sequence in your program:

```
'\x9C'
```

Notice that it's enclosed in single quotes. The C, or any other hexadecimal letter, can be upper- or lowercase. When the escape sequence is assigned to a character variable, the C compiler takes the preceding number and converts it into a character — the £ — which sits snugly until needed.