REMEMBER

WARNING!

✔ The equal sign is used to assign a non-string value to a variable. The variable goes on the left side of the equal sign and gets its value from whatever's on the right side.

✔ String variables cannot be defined in this way, by using an equal sign. You cannot say

```
kitty="Koshka";
```

It just doesn't work! Strings can be read into variables from the keyboard by using the `scanf()`, `gets()`, or other C language keyboard-reading functions. String variables can also be preset, but you cannot use an equal sign with them, like you can with numeric variables!

Entering numeric values from the keyboard

Keep the METHUS1.C program warm in your editor's oven for a few seconds. What does it really do? Nothing. Because the value 969 is already in the program, there's no surprise. The real fun with numbers comes when they're entered from the keyboard. Who knows what wacky value the user may enter? (That's another reason for a variable.)

A small problem arises in reading a value from the keyboard: Only strings are read from the keyboard; the `scanf()` and `gets()` functions you're familiar with have been used to read string variables. And, there's most definitely a difference between the characters "969" and the number 969. One is a value, and the other is a string. (I leave it up to you to figure out which is which.) The object is to covertly transform the string "969" into a value — nay, an *integer* value — of 969. The secret command to do it is `atoi`, the A-to-I function.

The atoi() function

The `atoi()` (pronounced "A-to-I") function converts numbers at the beginning of a string into an integer value. The *A* comes from the acronym *ASCII,* which is a coding scheme that assigns secret code numbers to characters. So `atoi` means "convert an ASCII (text) string into an integer value." That's how you can read integers from the keyboard. Here's the format:

```
var=atoi(string);
```

var is the name of a numeric variable, an integer variable created by the `int` keyword. That's followed by an equal sign, which is how you assign a value to a variable.