jate
kate
late
After loop ends, word is mate

Program Notes

The program has some interesting points. One, of course, is the test. We want the loop to continue as long as word is not mate. That is, we want the test to continue as long as strcmp() says the two strings are not the same. The most obvious test for that is this:

```
strcmp(word, "mate") != 0    // strings are not the same
```

This statement has the value 1 (true) if the strings are unequal and the value 0 (false) if they are equal. But what about `strcmp(word, "mate")` by itself? It has a nonzero value (true) if the strings are unequal and the value 0 (false) if the strings are equal. In essence, the function returns `true` if the strings are different and `false` if they are the same. You can use just the function instead of the whole relational expression. This produces the same behavior and involves less typing. Also, it’s the way C and C++ programmers traditionally have used `strcmp()`.

Remember

Use `strcmp()` to test strings for equality or order. The expression

```
strcmp(str1,str2) == 0
```

is true if `str1` and `str2` are identical; the expressions

```
strcmp(str1, str2) != 0
```

and

```
strcmp(str1, str2)
```

are true if `str1` and `str2` are not identical; the expression