The do loop in Example 8.3 could be replaced with:

```
cin >> word
while (*word)
{ cout << "\t\"" << word << "\"\n";
  cin >> word;
}
```

When Ctrl+Z is pressed, the call cin >> word assigns the empty C-string to word.

Example 8.3 and Example 8.1 illustrate an important distinction: the output operator << behaves differently with pointers of type char* than with other pointer types. With a char* pointer, the operator outputs the entire character string to which the pointer points. But with any other pointer type, the operator will simply output the address of the pointer.

8.5 SOME cin MEMBER FUNCTIONS

The input stream object cin includes the input functions: cin.getline(), cin.get(), cin.ignore(), cin.putback(), and cin.peek(). Each of these function names includes the prefix "cin." because they are "member functions" of the cin object.

The call cin.getline(str,n) reads up to n characters into str and ignores the rest.

EXAMPLE 8.4 The cin.getline() Function with Two Parameters

This program echoes the input, line by line:

```
int main()
{ char line[80];
   do
    { cin.getline(line, 80);
      if (*line) cout << "\t[" << line << "]\n";
   } while (*line);
}</pre>
```

Note that the condition (*line) will evaluate to "true" precisely when line contains a non-empty C-string, because only then will line[0] be different from the NUL character (ASCII value 0).

The call cin.getline(str,n,ch) reads all input up to the first occurrence of the delimiting character ch into str. If the specified character ch is the newline character $'\n'$, then this is equivalent to cin.getline(str,n). This is illustrated in the next example where the delimiting character is the comma ', '.

EXAMPLE 8.5 The cin.getline() Function

This program echoes the input, clause by clause:

```
int main()
{ char clause[80];
  do
  { cin.getline(clause, 80, ',');
    if (*clause) cout << "\t[" << clause << "]\n";
  } while (*clause);
}</pre>
```