Unbuffered Input and Output Solutions

Unbuffered Input and Output

- What is meant by "unbuffered input and output"?
 - Input and output is done without using the stream's internal buffer
 - No formatting is performed on the data
- When is it useful?
 - When we want to perform input and output one character at a time
 - When we want to send or receive data in blocks which have a different size from the buffer
 - When we want to have control over when data is sent or received
- Write a simple program that reads input from the keyboard and displays it on the screen, one character at a time

read() and write()

- What do the read() and write() member functions do?
 - They perform input and output, using a buffer managed by the programmer
- What arguments do read() and write() take?
 - A pointer to the buffer to be used
 - The maximum number of characters the buffer can store
- Write a simple program that uses read() and write() to fetch data from a file and display it on the screen

gcount()

- What does the gcount() member function do?
 - It returns the number of characters from the last call to read()
- Why is it useful?
 - We often do not know how much data we are going to receive
 - We need to check for partial transmissions, data corruption, dropped connections, etc
- Write a simple program that demonstrates the use of gcount()