Assignment #6 Producer and Consumer

This assignment will task students with managing the producer and consumer problem. Please utilize Chapter 4 of the Little Book of Semaphores to assist you in this assignment. Specifically, Section 4.1, 4.1.1, and 4.1.2 detail an elegant way of handling the consumer/producer issue. To complete this assignment, your program should:

* Accept two arguments form the command line (30%)
  + First argument is number of producer threads
  + Second argument is number of consumer threads
  + Producers create widgets and put them on the buffer, Consumer eats widgets and removes them from the buffer.
* Establish a buffer (20%)
  + Consider the buffer infinite
* Ensure that your program can produce at least 10 items, then consume those ten items successfully, without deadlock or crashing (30%)
* Display the results utilizing the standard display and/or output.txt (20%)

Save your program file as 6.cpp. Each of the bold bullets are worth the listed percentage.  
  
**Due date: Thursday, October 11th, by 11:59 PM**