**ECE 432-532 Lab exercise - 7**

**Fall 2017**

**Part 1:**

Download, check and run the code pr-cons-template.c from D2L. This code simulates the producer-consumer model. There is one shared buffer that the producer inserts elements and the consumers removes. The size of the buffer is 6 (you can change it if you want). The producer cannot insert if the buffer is full and the consumer cannot remove if the buffer is empty. Modify the code so as you do not have any errors at the output. You can verify this by adding more consumers and/or producers.

**Part 2:**

Download, check and run the code ProducerConsumer-template.c from D2L. This code simulates the producer-consumer model. There is one shared buffer in which the producer inserts elements and the consumers removes from.

The size of the buffer is 1 (don’t change). The producer cannot insert if the buffer is full and the consumer cannot remove if the buffer is empty. Modify the code so as you do not have any errors at the output (E.g. you cannot have two consumers/producers with the same output at the same time).

You can verify this by adding more consumers and/or producers.

Use condition variables