CSSE 332 -- Operating Systems

Producer Consumer Problem

Name: _____

Question 1. (5 points) For the problem where we have one produce and one consumer, write down the state of the world or the concurrency state. Make sure to provide a description of each state variable as well as its type and **default value**.

Question 2. (5 points) Based on your answer to the first question, write down the *waiting conditions* for each of the producer and the consumer threads. Feel free to write it in pseudo-code to avoid unnecessary clutter due to `pthreads` syntax.

Waiting conditions for the producer thread:

Waiting conditions for the consumer thread:

Question 3. (5 points) Briefly explain the changes that would need to be made to your approach once more consumers are added to the problem.

Question 4. (5 points) In the space below, write down the condition variables commandements that should always be honored when solving concurrency problems in this class.