The semaphore implementation was advantageous because it was easy to keep track of the full and empty counters of the buffers. For mutexes, we had to lock a mutex prior to making changes to any counter variables, which led to a clunkier implementation. On the other hand, mutexes with condition variables allowed us to easily sleep and wake up a thread when the buffers were empty or full. For the consumer implementation with semaphores, we had to use trywait otherwise the consumer would never wake up. This is because the producers would be done producing and the bufferPrinter had no method to wake up the consumer without modifying the counter values.