

CS483 – Lesson 07 – Shared Memory Bounded Buffer in C

Before you Begin

1. Create two new CLion projects, one called Lsn07_Inclass_Ex01_producer the other called Lsn07_Inclass_Ex01_consumer.

Exercises

1. **int producer consumer:** Modify the producer consumer examples shown in class to write/read integers from shared memory instead of strings. Implement fgets to get the integer to write from the user.

Challenge Exercise

For setup of challenge - Copy your existing projects for Ex01 and rename them as Lsn07_Inclass_Ex02_producer the other called Lsn07_Inclass_Ex02_consumer.

2. **shared mem bounded buffer:** Using the producer/consumer POSIX shared memory examples as a guide and your code from exercise 1, implement the bounded buffer problem as shown in the example on the board and discussed in the book using shared memory. The two processes will produce and consume randomly generated integers.