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CSCI 322 - Winter 2014
Homework 5
Due March 7

Compiling and Running

Included in the project are two programs: *atomic_sem* implements atomic broadcast using semaphores, and *atomic_cond* implements atomic broadcast using condition variables.

For compilation, use:

```
make atomic_sem
make atomic_cond
```

To run, use:

```
./atomic_sem
./atomic_cond
```

Verification

To verify each program's correctness, I investigated a number of edge cases as well as running each program several times to try to account for operating system fluctuations. Some of the conditions I tested were the producer trying to produce again before all consumers had consumed, producer trying to produce again before all but one consumer had consumed, producer trying to produce again before the last consumer had consumed, and all consumers trying to consume before input was produced. Under all of these tests, both programs performed correctly for a wide range of thread counts and loop iterations.