

Andre J Plath

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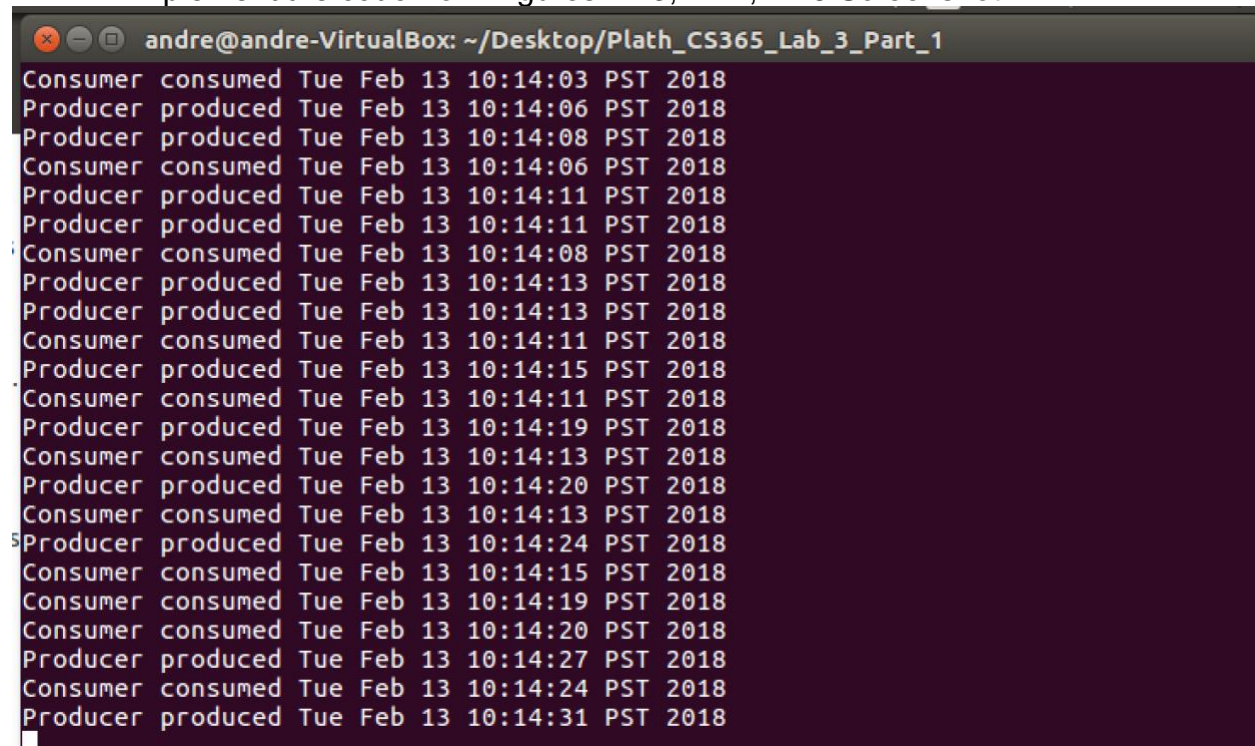
CS365 Operating Systems and Networking

February 13, 2018

## CS365 operating Systems and Networking Lab 3

Part I Producer and Consumer (Multithread):

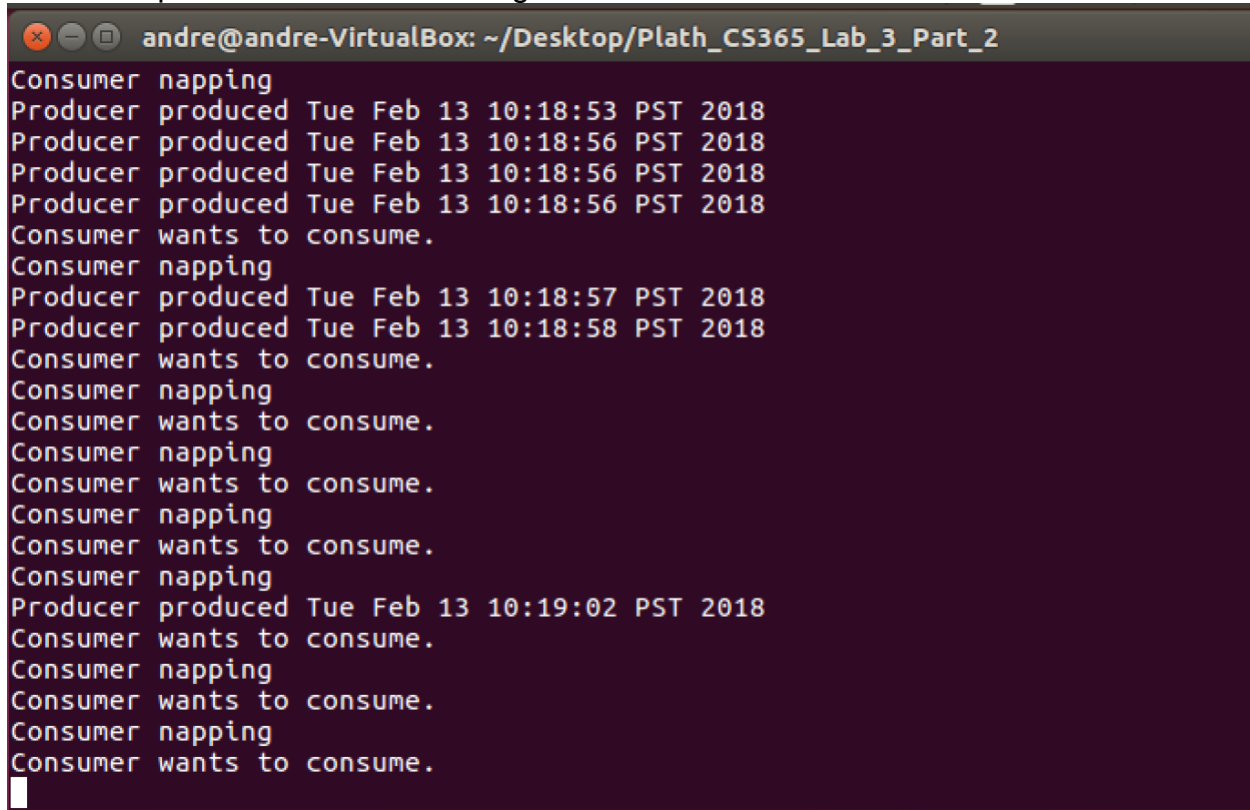
- Implement the code from Figures 4.13, 4.14, 4.15 Screenshot



```
andre@andre-VirtualBox: ~/Desktop/Plath_CS365_Lab_3_Part_1
Consumer consumed Tue Feb 13 10:14:03 PST 2018
Producer produced Tue Feb 13 10:14:06 PST 2018
Producer produced Tue Feb 13 10:14:08 PST 2018
Consumer consumed Tue Feb 13 10:14:06 PST 2018
Producer produced Tue Feb 13 10:14:11 PST 2018
Producer produced Tue Feb 13 10:14:11 PST 2018
Consumer consumed Tue Feb 13 10:14:08 PST 2018
Producer produced Tue Feb 13 10:14:13 PST 2018
Producer produced Tue Feb 13 10:14:13 PST 2018
Consumer consumed Tue Feb 13 10:14:11 PST 2018
Producer produced Tue Feb 13 10:14:15 PST 2018
Consumer consumed Tue Feb 13 10:14:11 PST 2018
Producer produced Tue Feb 13 10:14:19 PST 2018
Consumer consumed Tue Feb 13 10:14:13 PST 2018
Producer produced Tue Feb 13 10:14:20 PST 2018
Consumer consumed Tue Feb 13 10:14:13 PST 2018
Producer produced Tue Feb 13 10:14:24 PST 2018
Consumer consumed Tue Feb 13 10:14:15 PST 2018
Consumer consumed Tue Feb 13 10:14:19 PST 2018
Consumer consumed Tue Feb 13 10:14:20 PST 2018
Producer produced Tue Feb 13 10:14:27 PST 2018
Consumer consumed Tue Feb 13 10:14:24 PST 2018
Producer produced Tue Feb 13 10:14:31 PST 2018
```

## Part II Producer and Consumer (Semaphore):

- Implement the code from Figures 6.9 – 6.14 Screenshot



```
andre@andre-VirtualBox: ~/Desktop/Plath_CS365_Lab_3_Part_2
Consumer napping
Producer produced Tue Feb 13 10:18:53 PST 2018
Producer produced Tue Feb 13 10:18:56 PST 2018
Producer produced Tue Feb 13 10:18:56 PST 2018
Producer produced Tue Feb 13 10:18:56 PST 2018
Consumer wants to consume.
Consumer napping
Producer produced Tue Feb 13 10:18:57 PST 2018
Producer produced Tue Feb 13 10:18:58 PST 2018
Consumer wants to consume.
Consumer napping
Consumer wants to consume.
Consumer napping
Consumer wants to consume.
Consumer napping
Consumer wants to consume.
Consumer napping
Producer produced Tue Feb 13 10:19:02 PST 2018
Consumer wants to consume.
Consumer napping
Consumer wants to consume.
Consumer napping
Consumer wants to consume.
```

Part III GUI –Revise Part II:

(GUI was extra credit and was not done. However, the two attributes were added.)

- Add two attributes to the Bounded Buffer Class, producerSleep and consumerSleep, to set the sleep time of producer and consumer.
- Create with get() and set() methods for each.

```
andre@andre-VirtualBox: ~/Desktop/Plath_CS365_Lab_3_Part_3
andre@andre-VirtualBox:~/Desktop/Plath_CS365_Lab_3_Part_3$ java Factory
Consumer napping
Producer produced Tue Feb 13 10:24:02 PST 2018
Producer produced Tue Feb 13 10:24:05 PST 2018
Consumer wants to consume.
Consumer napping
Consumer wants to consume.
Consumer napping
Consumer wants to consume.
Producer produced Tue Feb 13 10:24:09 PST 2018
Consumer napping
Consumer wants to consume.
```