

OS Lab Week 6 and 7

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PES2201800475

Sem 5 Section F

C Program to simulate race condition in Producer- Consumer Problem

```
sivasurya ~/GoogleDrivePES/VSC/OS-Lab/Week_06/PES2201800475_SivaSuryaBabu_Week6-7 master gcc rc-p1.c
rc-p1.c:40:1: warning: control reaches end of non-void function [-Wreturn-type]
}
^
rc-p1.c:59:1: warning: control reaches end of non-void function [-Wreturn-type]
}
^
2 warnings generated.
sivasurya ~/GoogleDrivePES/VSC/OS-Lab/Week_06/PES2201800475_SivaSuryaBabu_Week6-7 master ./a.out
Producer:produced item :0
Producer:produced item :1
Consumer: Consumed item :0
Producer:produced item :2
Consumer: Consumed item :1
Producer:produced item :3
Consumer: Consumed item :2
Producer:produced item :4
Consumer: Consumed item :3
Producer:produced item :5
Consumer: Consumed item :4
Producer:produced item :6
Producer:produced item :7
Producer:produced item :8
Producer:produced item :9
Producer:produced item :0
Producer:produced item :1
Consumer: Consumed item :5
Producer:produced item :2
Producer:produced item :3
Consumer: Consumed item :6
^C
sivasurya ~/GoogleDrivePES/VSC/OS-Lab/Week_06/PES2201800475_SivaSuryaBabu_Week6-7 master
```

C program to implement Producer Consumer problem using Mutex (prevent race condition)

```
sivasurya@ubuntuVM:~/Documents/PES2201800475_SivaSuryaBabu_Week6-7$ gcc -pthread p2.c
sivasurya@ubuntuVM:~/Documents/PES2201800475_SivaSuryaBabu_Week6-7$ ./a.out
Producer : Produced item 1
Consumer : Consumed item 1
Producer : Produced item 2
Consumer : Consumed item 2
Producer : Produced item 3
Consumer : Consumed item 3
Producer : Produced item 4
Consumer : Consumed item 4
Producer : Produced item 5
Consumer : Consumed item 5
Producer : Produced item 6
Consumer : Consumed item 6
^C
sivasurya@ubuntuVM:~/Documents/PES2201800475_SivaSuryaBabu_Week6-7$
```