Government Engineering College, Thrissur
CS331 – System Software Lab
Documentation -
Exp 5 – Producer Consumer Problem

Date of Submission
26 September 2020

Submitted By
Kowsik Nandagopan D
Roll No 31
TCR18CS031
GECT CSE S5

Experiment 6

Implement the producer-consumer problem using semaphores.

Compilation of Code

Prerequisite

- The code is provided in the **program.c** along with this documentation. You can open the terminal in Linux (Ubuntu 18.04 tested). Then run the command

  gcc program.c

  ./a.out

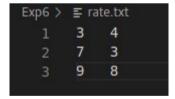- We can execute the code in console and see the output as soon as we press enter key. There **two** input file **rate.txt** and **nums.txt.**

  1. *rate.txt:* Each line shows producer-consumer rate. The data must be entered to this file in the following format. Please note that last line of the file mustn't be empty.

     <Producer Rate (Number)> <Tab> <Consumer Rate (Number)>

  2. *nums.txt:* It contains **two number separated by tab. First number is buffer size. Second number is number of lines in rate.txt**

- Output of the code will be printed on the **console**

- **Note: Please see the output.txt file for the output I got on my machine.**

Output / Screenshots

input.txt

nums.txt

P. T. O

Output


```
hp@hp-hp:~/Documents/Lab/Exp6$ ./a.out

Buffer spaces filled: 0
Consumer cannot consume : Buffer empty

Producer produced successfully
Buffer spaces filled: 3

Producer produced successfully
Buffer spaces filled: 10

Consumer consumed successfully
Buffer spaces filled: 6

Consumer consumed successfully
Buffer spaces filled: 3

Producer produced successfully
Buffer spaces filled: 12

Consumer consumed successfully
Buffer spaces filled: 4
```

3