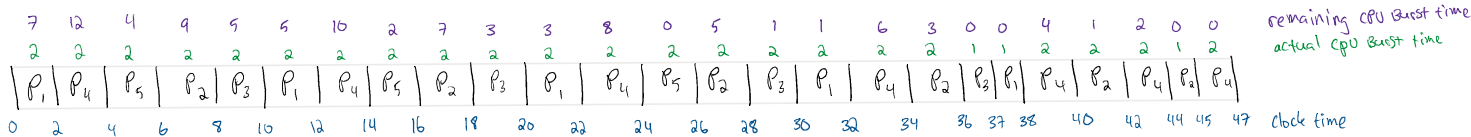


Part A

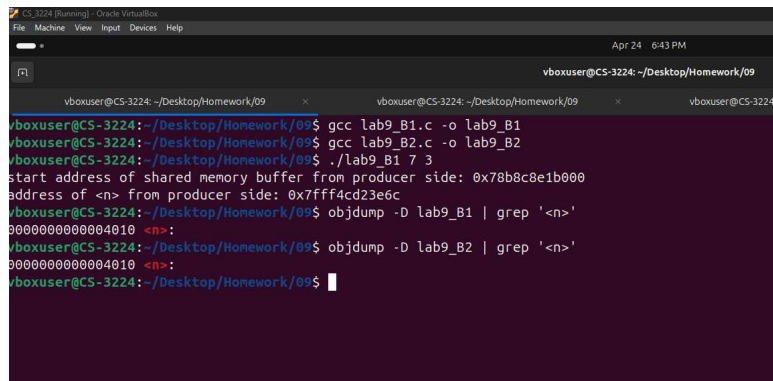
SRTF

Process	turnaround time	waiting time
P ₁	22 - 0 = 22	22 - 9 = 13
P ₂	33 - 2 = 31	31 - 11 = 20
P ₃	14 - 2 = 12	12 - 7 = 5
P ₄	49 - 1 = 48	48 - 16 = 32
P ₅	7 - 1 = 6	6 - 6 = 0

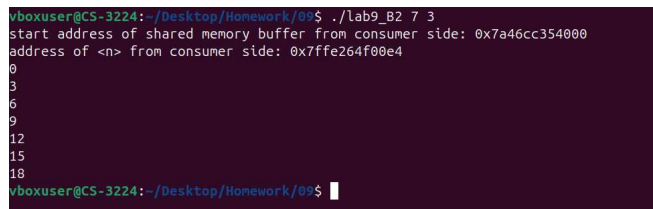
Round Robin

Process	turnaround time	waiting time
P ₁	38 - 0 = 38	38 - 9 = 29
P ₂	45 - 2 = 43	43 - 11 = 32
P ₃	37 - 2 = 35	35 - 7 = 28
P ₄	47 - 1 = 46	46 - 16 = 30
P ₅	26 - 1 = 25	25 - 6 = 19

Part B



```
vboxuser@CS-3224: ~/Desktop/Homework/09$ gcc lab9_B1.c -o lab9_B1
vboxuser@CS-3224: ~/Desktop/Homework/09$ gcc lab9_B2.c -o lab9_B2
vboxuser@CS-3224: ~/Desktop/Homework/09$ ./lab9_B1 7 3
start address of shared memory buffer from producer side: 0x78b8c8e1b000
address of <n> from producer side: 0x7fff4cd23e6c
vboxuser@CS-3224: ~/Desktop/Homework/09$ objdump -D lab9_B1 | grep '<n>'
00000000000004010 <n>:
vboxuser@CS-3224: ~/Desktop/Homework/09$ objdump -D lab9_B2 | grep '<n>'
00000000000004010 <n>:
vboxuser@CS-3224: ~/Desktop/Homework/09$
```



```
vboxuser@CS-3224: ~/Desktop/Homework/09$ ./lab9_B2 7 3
start address of shared memory buffer from consumer side: 0x7a46cc354000
address of <n> from consumer side: 0x7ffe264f00e4
0
3
6
9
12
15
18
vboxuser@CS-3224: ~/Desktop/Homework/09$
```

1. In both processes, print the start address of the shared buffer
2. Was the address printed Logical (virtual) or physical address?
The printed addresses are virtual
3. Print the address of n from your running program and also,
4. Find out where it's stored in the .elf file (executable).
5. Did the addresses match (printed from the nmning program vs the one in the program's elf file)? Why?
No, the address of n printed in the programs does not match the address in the program's elf file
This is because an elf file is still a relocatable file object and the final addresses were not yet rebound as this happens right before the program is loaded into memory
6. What is the virtual address of the entry point in your producer and consumer programs? (note that in most programs, some initialization is first invoked before calling "main()").
Producer: 0x000000000000013a7
Consumer: 0x000000000000012b0