

H M Mythreya

PES2UG20CS130

OS Lab Week-3

1) Program to demonstrate fcfs.

```
(kali@kali) - [~/OS_LAB/OS/LAB/Week 3]
$ ./a.out
Enter the number of processes to schedule:5
Enter the Process Name, Arrival Time and Burst Time of the processes:p1 5 5
Enter the Process Name, Arrival Time and Burst Time of the processes:p2 5 3
Enter the Process Name, Arrival Time and Burst Time of the processes:p3 7 2
Enter the Process Name, Arrival Time and Burst Time of the processes:p4 9 12
Enter the Process Name, Arrival Time and Burst Time of the processes:p5 10 20

ProcessName    ArrivalTime    BurstTime    WaitTime    Start    TurnAroundTime    Finish
-----
p2             5              3            0           5        3                8
p1             5              5            3           8        8               13
p3             7              2            6          13        8               15
p4             9             12            6          15       18               27
p5            10             20           17          27       37               47

Average Waiting time:6.400000
Average Turn Around Time:14.800000
```

2) Program to demonstrate priority scheduling.

```
(kali@kali) - [~/OS_LAB/OS/LAB/Week 3]
$ gcc priority.c
(kali@kali) - [~/OS_LAB/OS/LAB/Week 3]
$ ./a.out
Enter the number of process:5
Enter process name,arrivaltime,execution time & priority:p1 5 10 3
Enter process name,arrivaltime,execution time & priority:p2 5 5 2
Enter process name,arrivaltime,execution time & priority:p3 5 5 1
Enter process name,arrivaltime,execution time & priority:p4 10 10 5
Enter process name,arrivaltime,execution time & priority:p5 10 20 4

Process name    arrival time    execution time    priority    waiting time    turn around time
-----
p3             5              5                1           0                5
p2             5              5                2           5               10
p1             5             10                3          10               20
p5            10             20                4          15               35
p4            10             10                5          35               45

Average waiting time is:13.000000
Average turnaroundtime is:23.000000
```

3) Program to demonstrate round robin scheduling.

```
(kali@kali) - [~/OS_LAB/OS/LAB/Week 3]
$ ./a.out
Enter the total number of process to schedule: 5
Enter the Arrival and Burst time of the Process[1]: 5 7
Enter the Arrival and Burst time of the Process[2]: 5 12
Enter the Arrival and Burst time of the Process[3]: 8 9
Enter the Arrival and Burst time of the Process[4]: 10 3
Enter the Arrival and Burst time of the Process[5]: 5 5
Enter the Time Quantum for the process: 10
Enter the total number of process to schedule: 5

Process No      Burst Time      TAT      Waiting Time
Process No[1]   7               2        -5
Process No[3]   9               18       9
Process No[4]   3               19       16
Process No[5]   5               29       24
Process No[2]   12              31       19
Average Turn Around Time: 19.799999
Average Waiting Time: 12.600000
```

4) Program to demonstrate sjf.

```
(kali㉿kali)-[~/OS_LAB/OS/LAB/Week 3]
$ gcc sjf.c

(kali㉿kali)-[~/OS_LAB/OS/LAB/Week 3]
$ ./a.out
Enter the number of processes to schedule:5
Enter the process name, arrival time and execution time of each process:p1 5 5
Enter the process name, arrival time and execution time of each process:p2 5 3
Enter the process name, arrival time and execution time of each process:p3 7 2
Enter the process name, arrival time and execution time of each process:p4 9 12
Enter the process name, arrival time and execution time of each process:p5 10 20

Process ArrivalTime      ExecutionTime      WaitingTime      TurnAroundTime
-----
p3          7              2                0                2
p2          5              3                4                7
p1          5              5                7               12
p4          9             12                8               20
p5         10             20               19               39
Average waiting time is: 7.600000
Average turnaround time is: 16.000000
```

5) Program to demonstrate srtf.

```
(kali㉿kali)-[~/OS_LAB/OS/LAB/Week 3]
$ ./a.out
130 x
Enter the number of processes to schedule:
5
Enter the process name, arrival time and burst time for each process:
p1 5 5
Enter the process name, arrival time and burst time for each process:
p2 5 3
Enter the process name, arrival time and burst time for each process:
p3 7 2
Enter the process name, arrival time and burst time for each process:
p4 9 12
Enter the process name, arrival time and burst time for each process:
p5 10 20
Process burst-time      arrival-time      waiting-time      turnaround-time      completion-time
-----
p1          5              5                5                10                15
p2          3              5                0                 3                 8
p3          2              7                1                 3                10
p4         12              9                6                18                27
p5         20             10               17               37                47

Average waiting time = 5.800000
Average Turnaround time = 14.200000
```