

Ex. No.: 6a)
Date: 19/02/2025

FIRST COME FIRST SERVE

Aim:

To implement First-come First-serve (FCFS) scheduling technique

Algorithm:

1. Get the number of processes from the user.
2. Read the process name and burst time.
3. Calculate the total process time.
4. Calculate the total waiting time and total turnaround time for each process 5.
6. Display the process name & burst time for each process. 6. Display the total waiting time, average waiting time, turnaround time

Program Code:

```
S1, S2 = 0, 0
P = int(input("Enter the no. of processes: "))
Print("Enter the burst time of the processes:")
bt, at, ct, tat, wt, pt = [], [], [], [], [], []
for i in range(P):
    bt.append(int(input()))
    at.append(0)
    pt.append(i)
    ct.append(bt[0])
for i in range(1, len(bt)):
    ct.append(ct[i-1] + bt[i])
for i in range(P):
    tat.append(ct[i] - at[i])
    wt.append(tat[i] - bt[i])
Print("\n process\t\t Burst time\t\t Turn around\n time\t\t Waiting Time")
for i in range(P):
    S1 += wt[i]
    S2 += tat[i]
```


Print C "Average Waiting time : ", s1/P)

Print C "Average Turn around Time : ", s2/P)

Sample Output:

Enter the number of process:

3

Enter the burst time of the processes:

24 3 3

| Process | Burst Time | Waiting Time | Turn Around Time |
|---------|------------|--------------|------------------|
| 0 | 24 | 0 | 24 |
| 1 | 3 | 24 | 27 |
| 2 | 3 | 27 | 30 |

Average waiting time is: 17.0

Average Turn around Time is: 19.0

Enter the no. of. processes : 5

Enter the burst time of the processes:

6
2
8
3
4

| Process | BurstTime | TurnAround Time | Waiting time |
|---------|-----------|-----------------|--------------|
| 0 | 6 | 6 | 0 |
| 1 | 2 | 8 | 6 |
| 2 | 8 | 16 | 8 |
| 3 | 3 | 19 | 16 |
| 4 | 4 | 23 | 19 |

Average Waiting Time: 9.8

Average Turn Around Time: 14.4

Result:

Thus the First Come First Serve Algo. has been successfully executed using python program.

[Signature]