OS LAB MANUAL

(CS23431)

Lab:3

Roll No:230701263

EX.NO:6A

FIRST COME FIRST SERVE

Aim: FIRST COME FIRST SERVE To implement First-come First- serve (FCFS) scheduling technique

```
Program: #include
<stdio.h>
               int
main() {
  int n, i;
  int burst time[10], waiting time[10], turnaround time[10];
  int total waiting time = 0, total turnaround time = 0;
  printf("Enter the number of processes: "); scanf("%d", &n);
  printf("Enter the burst time of the processes:\n");
  for (i = 0; i < n; i++) {
    printf("Process %d: ", i); scanf("%d",
    &burst time[i]);
  }
  waiting time[0] = 0;
  for (i = 1; i < n; i++) {
    waiting_time[i] = burst_time[i - 1] + waiting_time[i - 1];
  }
  for (i = 0; i < n; i++) {
    turnaround_time[i] = burst_time[i] + waiting_time[i];
  }
```

```
printf("\nProcess\tBurst Time\tWaiting Time\tTurn Around Time\n");
 for (i = 0; i < n; i++) {
   printf("%d\t\d\t\t%d\n", i, burst time[i], waiting time[i], turnaround time[i]);
 }
 for (i = 0; i < n; i++) {
   total_waiting_time += waiting_time[i]; total_turnaround_time
   += turnaround time[i];
 }
 printf("\nAverage waiting time is: %.2f", (float)total_waiting_time / n); printf("\nAverage
 Turnaround Time is: %.2f\n", (float)total turnaround time / n);
 return 0;
}
Input:
Enter the number of processes: 4
Enter the burst time of the processes:
Process 0: 5
Process 1: 7
Process 2: 9
Process 3: 7
```

OUTPUT:

```
Process Burst Time Waiting Time
                                   Turn Around Time
0
    5
                   5
           0
   7
            5
                   12
2
   9
                   21
           12
3
   7
           21
                   28
Average Waiting Time: 9.50
Average Turnaround Time: 16.50
```