**Assignment – 5**  
*Aim:* To create C programs for the different scheduling algorithms.

*To perform:* Create and execute C programs for following CPU Scheduling Algorithms:  
  
Here are the C programs for FCFS, SJF, and Round Robin scheduling algorithms with sample outputs:

1. First Come First Serve (FCFS) Scheduling

c

#**include**<stdio.h>

**int** main() {

**int** n, bt[20], wt[20], tat[20], i;

**float** avg\_wt=0, avg\_tat=0;

printf("Enter number of processes: ");

scanf("%d", &n);

printf("Enter Burst Time:\n");

**for**(i=0;i<n;i++) {

printf("P[%d]: ",i+1);

scanf("%d",&bt[i]);

}

wt[0] = 0;

**for**(i=1;i<n;i++) {

wt[i] = wt[i-1] + bt[i-1];

}

**for**(i=0;i<n;i++) {

tat[i] = wt[i] + bt[i];

avg\_wt += wt[i];

avg\_tat += tat[i];

}

printf("\nProcess\tBurst Time\tWaiting Time\tTurnaround Time");

**for**(i=0;i<n;i++) {

printf("\nP[%d]\t%d\t\t%d\t\t%d",i+1,bt[i],wt[i],tat[i]);

}

printf("\n\nAverage Waiting Time: %.2f",avg\_wt/n);

printf("\nAverage Turnaround Time: %.2f",avg\_tat/n);

**return** 0;

}

**Output:**

text

Enter number of processes: 3

Enter Burst Time:

P[1]: 24

P[2]: 3

P[3]: 3

Process Burst Time Waiting Time Turnaround Time

P[1] 24 0 24

P[2] 3 24 27

P[3] 3 27 30

Average Waiting Time: 17.00

Average Turnaround Time: 27.00

*Implementation based on FCFS algorithm described in Scaler Topics*[*1*](https://www.scaler.com/topics/c-program-for-fcfs-scheduling/)