

Subhradip Debnath
Sec : A
Roll : 19
CSE Department
Institute of Engineering and Management, Kolkata
Date : Tuesday, 15 December 2020

Code :

FCFS

```
#include <stdio.h>
int waitingtime(int proc[], int n,
int burst_time[], int wait_time[]) {
    wait_time[0] = 0;
    for (int i = 1; i < n ; i++)
        wait_time[i] = burst_time[i-1] + wait_time[i-1] ;
    return 0;
}
int turnaroundtime( int proc[], int n,
int burst_time[], int wait_time[], int tat[]) {
    int i;
    for ( i = 0; i < n ; i++)
        tat[i] = burst_time[i] + wait_time[i];
    return 0;
}
int avgtime( int proc[], int n, int burst_time[]) {
    int wait_time[n], tat[n], total_wt = 0, total_tat = 0;
    int i;
    waitingtime(proc, n, burst_time, wait_time);
    turnaroundtime(proc, n, burst_time, wait_time, tat);
    printf("Processes Burst   Waiting Turn around \n");
    for ( i=0; i<n; i++) {
        total_wt = total_wt + wait_time[i];
        total_tat = total_tat + tat[i];
        printf(" %d\t %d\t\t %d \t\t%d\n", i+1, burst_time[i], wait_time[i], tat[i]);
    }
    printf("Average waiting time = %f\n", (float)total_wt / (float)n);
    printf("Average turn around time = %f\n", (float)total_tat / (float)n);
    return 0;
}
int main() {
    int proc[] = { 1, 2, 3};
    int n = sizeof proc / sizeof proc[0];
    int burst_time[] = {5, 8, 12};
    avgtime(proc, n, burst_time);
    return 0;
}
```

Output :

Processes	Burst	Waiting	Turn around
1	5	0	5
2	8	5	13
3	12	13	25

Average waiting time = 6.000000
Average turn around time = 14.333333