

Write a C program to simulate the following CPU scheduling algorithm to find turnaround time and waiting time.

a) FCFS

```
#include <stdio.h>

int main() {
    int n, i;
    int bt[20], wt[20], tat[20];
    int total_wt = 0, total_tat = 0;

    printf("Enter the number of processes: ");
    scanf("%d", &n);

    printf("Enter the burst time for each process:\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] = bt[i-1] + wt[i-1];
    }

    for(i = 0; i < n; i++) {
        tat[i] = bt[i] + wt[i];
    }

    printf("\nProcess\tBurst Time\tWaiting Time\tTurnaround Time\n");
    for(i = 0; i < n; i++) {
        printf("P[%d]\t\t%d\t\t%d\t\t%d\n", i+1, bt[i], wt[i], tat[i]);
        total_wt += wt[i];
        total_tat += tat[i];
    }

    printf("\nAverage Waiting Time = %.2f", (float)total_wt / n);
    printf("\nAverage Turnaround Time = %.2f\n", (float)total_tat / n);

    return 0;
}
```

Output

▲ Enter the number of processes: 2
Enter the burst time for each process:
P[1]: 3
P[2]: 6

Process	Burst Time	Waiting Time	Turnaround Time
P[1]	3	0	3
P[2]	6	3	9

Average Waiting Time = 1.50
Average Turnaround Time = 6.00

=== Code Execution Successful ===