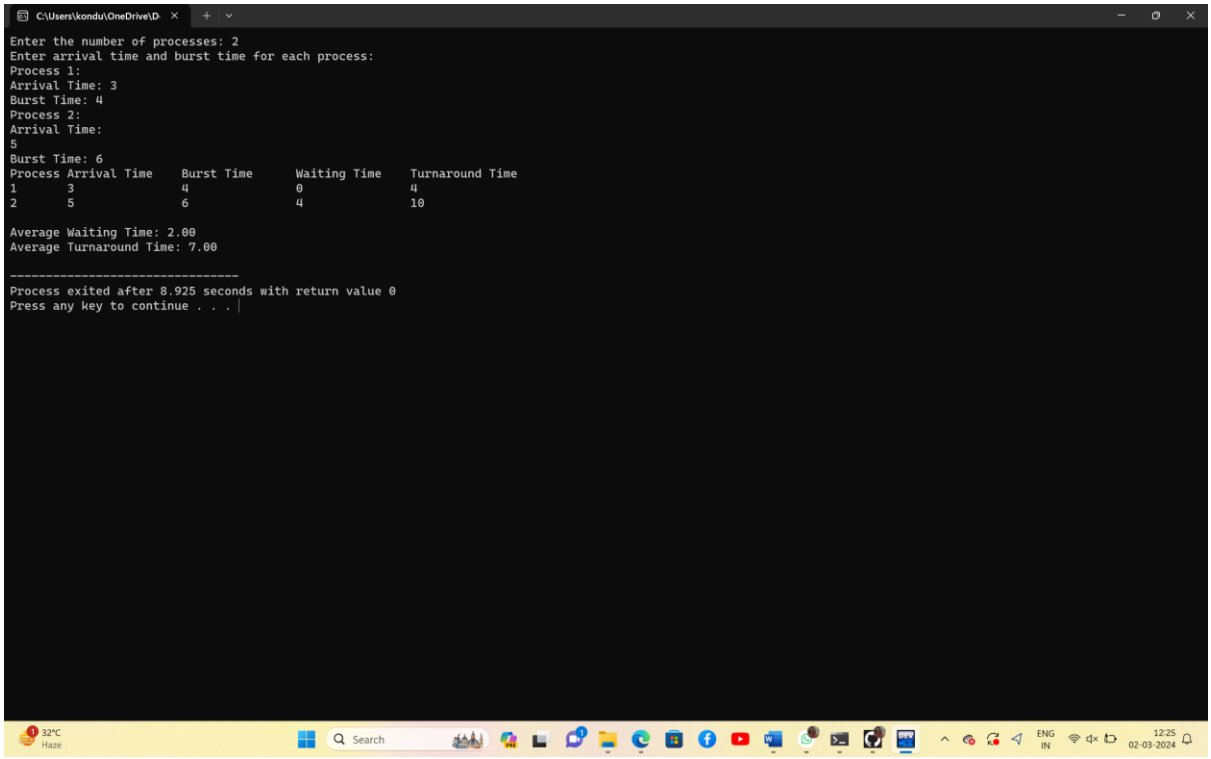
```
#include <stdio.h>

struct Process {
    int id;         // Process ID
    int arrival_time;// Arrival time of the process
    int burst_time;  // Burst time of the process
    int waiting_time;// Waiting time of the process
    int turnaround_time; // Turnaround time of the process
};

void calculateTimes(struct Process processes[], int n) {
    int total_waiting_time = 0;
    int total_turnaround_time = 0;

    processes[0].waiting_time = 0;
    processes[0].turnaround_time = processes[0].burst_time;

    total_waiting_time = processes[0].waiting_time;
    total_turnaround_time = processes[0].turnaround_time;

    for (int i = 1; i < n; i++) {
        processes[i].waiting_time = processes[i - 1].waiting_time + processes[i - 1].burst_time;
        processes[i].turnaround_time = processes[i].waiting_time + processes[i].burst_time;

        total_waiting_time += processes[i].waiting_time;
        total_turnaround_time += processes[i].turnaround_time;
    }

    double avg_waiting_time = (double)total_waiting_time / n;
    double avg_turnaround_time = (double)total_turnaround_time / n;
```

```
    printf("Process\tArrival Time\tBurst Time\tWaiting Time\tTurnaround Time\n");

    for (int i = 0; i < n; i++) {
        printf("%d\t%d\t\t%d\t\t%d\t\t%d\n", processes[i].id, processes[i].arrival_time,
processes[i].burst_time,
                processes[i].waiting_time, processes[i].turnaround_time);
    }

    printf("\nAverage Waiting Time: %.2f\n", avg_waiting_time);
    printf("Average Turnaround Time: %.2f\n", avg_turnaround_time);
}

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

    struct Process processes[n];

    printf("Enter arrival time and burst time for each process:\n");
    for (int i = 0; i < n; i++) {
        processes[i].id = i + 1;
        printf("Process %d:\n", processes[i].id);
        printf("Arrival Time: ");
        scanf("%d", &processes[i].arrival_time);
        printf("Burst Time: ");
        scanf("%d", &processes[i].burst_time);
    }

    calculateTimes(processes, n);
```

```
    return 0;
}
```


C:\Users\kondu\OneDrive\D
Enter the number of processes: 2
Enter arrival time and burst time for each process:
Process 1:
Arrival Time: 3
Burst Time: 4
Process 2:
Arrival Time:
5
Burst Time: 6
Process Arrival Time Burst Time Waiting Time Turnaround Time
1 3 4 0 4
2 5 6 4 10
Average Waiting Time: 2.00
Average Turnaround Time: 7.00
Process exited after 8.925 seconds with return value 0
Press any key to continue . . .
32°C
Haze
Search
ENG
IN
12:25
02-03-2024