

sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ nano 1086_exp5.c
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ gcc 1086_exp5.c
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ ./a.out
```

Enter number of processes: 5

Enter burst time of each process:

Process 1: 4

Process 2: 3

Process 3: 1

Process 4: 2

Process 5: 5

Process	Burst Time	Waiting Time	Turnaround Time	Completion Time
P1	4	0	4	4
P2	3	4	7	7
P3	1	7	8	8
P4	2	8	10	10
P5	5	10	15	15

Average Waiting Time = 5.80

Average Turnaround Time = 8.80

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$
```

GNU nano 6.2

1086_exp5.c

```
#include <stdio.h>
```

```
int main() {
    int n, i;
    int bt[10], wt[10], tat[10], ct[10];
    float avg_wt = 0, avg_tat = 0;

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

    printf("Enter burst time of each process:\n");
    for (i = 0; i < n; i++) {
        printf("Process %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];
        ct[i] = tat[i];
        avg_wt += wt[i];
        avg_tat += tat[i];
    }

    avg_wt /= n;
    avg_tat /= n;

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

    printf("\nAverage Waiting Time = %.2f", avg_wt);
    printf("\nAverage Turnaround Time = %.2f\n", avg_tat);

    return 0;
}
```