

- **Code for implementation FCFS in C programming language:**

```
#include <stdio.h>

struct process {
    char name[10];
    int burst;
    int waiting;
};

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

    struct process p[n];

    for (int i = 0; i < n; i++) {
        printf("Enter the name of process %d: ", i + 1);
        scanf("%s", p[i].name);

        printf("Enter the burst time of process %d: ", i + 1);
        scanf("%d", &p[i].burst);
    }

    p[0].waiting = 0;
    float totalWaiting = 0;

    for (int i = 1; i < n; i++) {
        p[i].waiting = p[i-1].waiting + p[i-1].burst;
        totalWaiting += p[i].waiting;
    }

    totalWaiting += p[0].waiting;

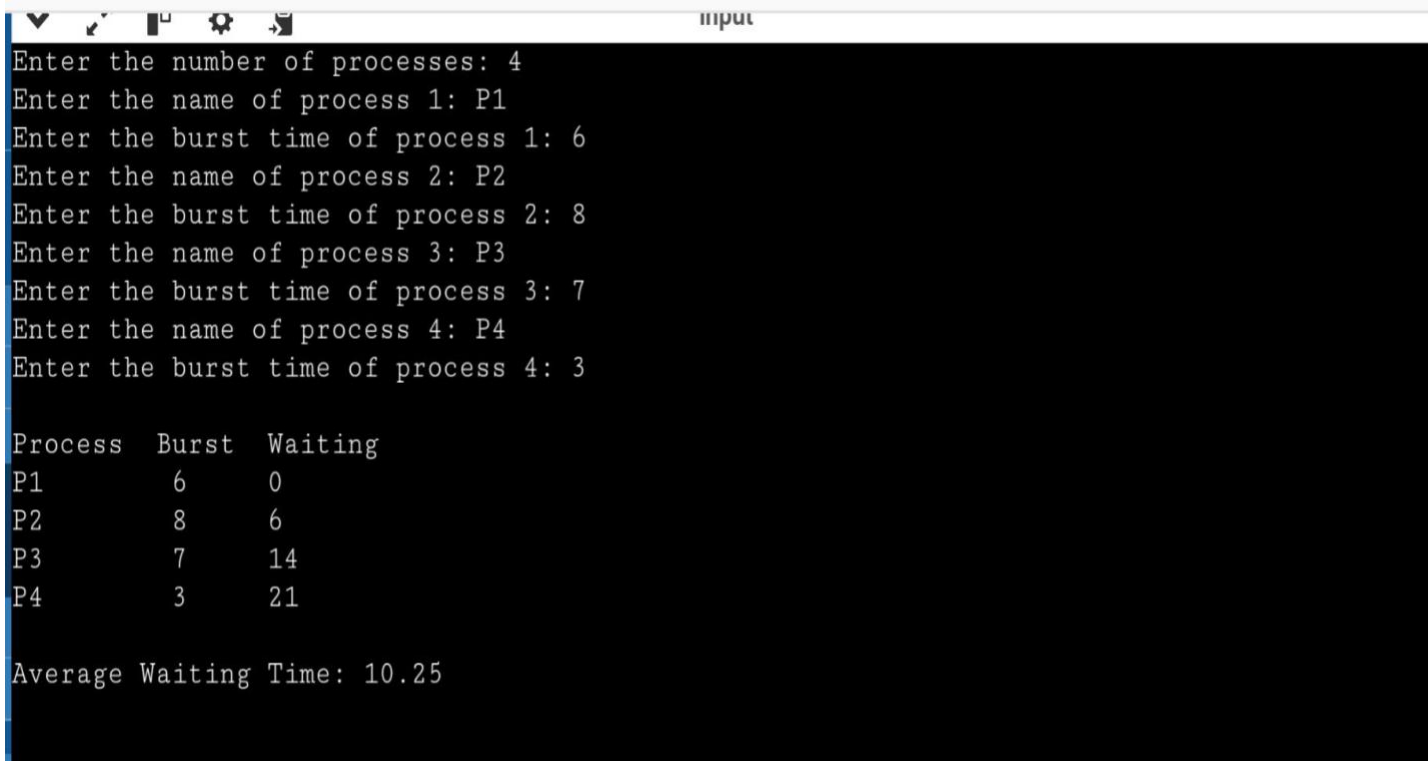
    printf("\nProcess Burst Waiting\n");
    for (int i = 0; i < n; i++) {
        printf("%s    %d    %d\n", p[i].name, p[i].burst, p[i].waiting);
    }

    float averageWaiting = totalWaiting / n;
```

```
printf("\nAverage Waiting Time: %.2f\n", averageWaiting);

return 0;
}
```

- **Output:**



```
input
Enter the number of processes: 4
Enter the name of process 1: P1
Enter the burst time of process 1: 6
Enter the name of process 2: P2
Enter the burst time of process 2: 8
Enter the name of process 3: P3
Enter the burst time of process 3: 7
Enter the name of process 4: P4
Enter the burst time of process 4: 3

Process  Burst  Waiting
P1       6      0
P2       8      6
P3       7     14
P4       3     21

Average Waiting Time: 10.25
```