

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

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int main() {
    int n, i, j;
    int bt[20], p[20], wt[20], tat[20], temp;
    float wtavg = 0, tatavg = 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("Process %d: ", i+1);
        scanf("%d", &bt[i]);
        p[i] = i+1;
    }

    for(i = 0; i < n-1; i++) {
        for(j = i+1; j < n; j++) {
            if(bt[i] > bt[j]) {

                temp = bt[i];
                bt[i] = bt[j];
                bt[j] = temp;

                temp = p[i];
                p[i] = p[j];
                p[j] = temp;
            }
        }
    }

    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];
        wtavg += wt[i];
        tatavg += tat[i];
    }
    wtavg=wtavg / n;
    tatavg=tatavg / n;

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

    printf("\nAverage Waiting Time: %.2f", wtavg);
    printf("\nAverage Turnaround Time: %.2f\n", tatavg);

    return 0;
}
```

```
PS C:\Users\STUDENT> cd "c:\Users\STUDENT\Documents\" ; if ($?) { gcc sjf.c -o sjf } ; if ($?) { .\sjf }
Enter the number of processes: 4
Enter the burst time for each process:
Process 1: 6
Process 2: 8
Process 3: 7
Process 4: 3

Process Burst Time    Waiting Time    Turnaround Time
4        3              0               3
1        6              3               9
3        7              9              16
2        8             16              24

Average Waiting Time: 7.00
Average Turnaround Time: 13.00
PS C:\Users\STUDENT\Documents> 
```