

```
1  #include <stdio.h>
2  int main() {
3      int bt[20], p[20], wt[20], tat[20], i, j, n, total = 0, pos, temp;
4      float avg_wt, avg_tat;
5      printf("Enter number of process: ");
6      scanf("%d", &n);
7      printf("Enter Burst Time:\n");
8      for (i = 0; i < n; i++) {
9          printf("p%d: ", i + 1);
10         scanf("%d", &bt[i]);
11         p[i] = i + 1;
12     }
13     for (i = 0; i < n; i++) {
14         pos = i;
15         for (j = i + 1; j < n; j++) {
16             if (bt[j] < bt[pos])
17                 pos = j;}
18         temp = bt[i];
19         bt[i] = bt[pos];
20         bt[pos] = temp;
21         temp = p[i];
22         p[i] = p[pos];
23         p[pos] = temp;
24     }
```

```
25     wt[0] = 0;
26     for (i = 1; i < n; i++) {
27         wt[i] = 0;
28         for (j = 0; j < i; j++)
29             wt[i] += bt[j];
30         total += wt[i];
31     }
32     avg_wt = (float)total / n;
33     total = 0;
34     printf("\nP\tBT\tWT\tTAT\n");
35     for (i = 0; i < n; i++) {
36         tat[i] = bt[i] + wt[i];
37         total += tat[i];
38         printf("p%d\t%d\t%d\t%d\n", p[i], bt[i], wt[i], tat[i]);
39     }
40     avg_tat = (float)total / n;
41     printf("\nAverage Waiting Time = %.2f", avg_wt);
42     printf("\nAverage Turnaround Time = %.2f\n", avg_tat);
43     return 0;
44 }
```

Enter number of process: 5

Enter Burst Time:

p1: 5

p2: 2

p3: 8

p4: 7

p5: 3

P	BT	WT	TAT
---	----	----	-----

p2	2	0	2
----	---	---	---

p5	3	2	5
----	---	---	---

p1	5	5	10
----	---	---	----

p4	7	10	17
----	---	----	----

p3	8	17	25
----	---	----	----

Average Waiting Time = 6.80

Average Turnaround Time = 11.80

=== Code Execution Successful ===