

```
1  #include <stdio.h>
2  int main()
3  {
4  int A[100][4];
5  int i, j, n, total = 0, index, temp;
6  float avg_wt, avg_tat;
7  printf("Enter number of process: ");
8  scanf("%d", &n);
9  printf("Enter Burst Time:\n");
10 for (i = 0; i < n; i++) {
11 printf("P%d: ", i + 1);
12 scanf("%d", &A[i][1]);
13 A[i][0] = i + 1;
14 }
15 for (i = 0; i < n; i++) {
16 index = i;
17 for (j = i + 1; j < n; j++)
18 if (A[j][1] < A[index][1])
19 index = j;
20 temp = A[i][1];
21 A[i][1] = A[index][1];
22 A[index][1] = temp;
23 temp = A[i][0];
24 A[i][0] = A[index][0];
```

```
25 A[index][0]= temp;
26 }
27 A[0][2] = 0;
28 for (i = 1; i < n; i++) {
29 A[i][2] = 0;
30 for (j = 0; j < i; j++)
31 A[i][2] += A[j][1];
32 total += A[i][2];
33 }
34 avg_wt = (float)total / n;
35 total = 0;
36 printf("P BT WT TAT\n");
37 for (i = 0; i < n; i++) {
38 A[i][3] = A[i][1] + A[i][2];
39 total += A[i][3];
40 printf("P%d %d %d %d\n", A[i][0],A[i][1],A[i][2], A[i][3]);
41 }
42 avg_tat = (float)total / n;
43 printf("Average Waiting Time= %f", avg_wt);
44 printf("\nAverage Turnaround Time= %f", avg_tat);
45 }
```

Enter number of process: 4

Enter Burst Time:

P1: 8

P2: 3

P3: 5

P4: 7

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

| | | | |
|----|---|---|---|
| P2 | 3 | 0 | 3 |
|----|---|---|---|

| | | | |
|----|---|---|---|
| P3 | 5 | 3 | 8 |
|----|---|---|---|

| | | | |
|----|---|---|----|
| P4 | 7 | 8 | 15 |
|----|---|---|----|

| | | | |
|----|---|----|----|
| P1 | 8 | 15 | 23 |
|----|---|----|----|

Average Waiting Time= 6.500000

Average Turnaround Time= 12.250000

=== Code Execution Successful ===