

(globals)

Project C FCFSOS.C x SJFOS.C x

```
1 #include <stdio.h>
2 int main()
3 {
4     int A[100][4];
5     int i, j, n, total = 0, index, temp; float avg_wt, avg_tat;
6     printf("Enter number of process: "); scanf("%d", &n);
7     printf("Enter Burst Time:\n");
8     for (i = 0; i < n; i++) {
9         printf("P%d: ", i + 1); scanf("%d", &A[i][1]); A[i][0] = i + 1;
10    }
11    for (i = 0; i < n; i++) {
12        index = i;
13        for (j = i + 1; j < n; j++)
14            if (A[j][1] < A[index][1]) index = j;
15        temp = A[i][1]; A[i][1] = A[index][1]; A[index][1] = temp;
16        temp = A[i][0];
17        A[i][0] = A[index][0]; A[index][0] = temp;
18    }
19    A[0][2] = 0;
20    for (i = 1; i < n; i++) {
21        A[i][2] = 0;
22        for (j = 0; j < i; j++)
23            A[i][2] += A[j][1];
24        total += A[i][2];
25    }
26    avg_wt = (float)total / n; total = 0;
27    printf("P BT WT TAT\n"); for (i = 0; i < n; i++) {
28        A[i][3] = A[i][1] + A[i][2];
29        total += A[i][3];
30        printf("P%d %d %d %d\n", A[i][0], A[i][1], A[i][2], A[i][3]);
31    }
32    avg_tat = (float)total / n;
33    printf("Average Waiting Time= %f", avg_wt); printf("\nAverage Turnaround Time= %f", avg_tat);
34 }
```

C:\Users\aswin\Documents\SJFOS.exe

Enter number of process: 4

Enter Burst Time:

P1: 12

P2: 32

P3: 8

P4: 22

P BT WT TAT

P3 8 0 8

P1 12 8 20

P4 22 20 42

P2 32 42 74

Average Waiting Time= 17.500000

Average Turnaround Time= 36.000000

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Process exited after 16.44 seconds with return value 0

Press any key to continue . . .