PROGRAM NUMBER : 03

PROGRAM:

```
#include <stdio.h> int
main()
{
int A[100][4];
int i, j, n, total = 0, index, temp; float
avg_wt, avg_tat;
printf("Enter number of process: ");
scanf("%d", &n);
printf("Enter Burst Time:\n"); for (i
= 0; i < n; i++) {
printf("P%d: ", i + 1);
scanf("%d", &A[i][1]);
A[i][0] = i + 1;
}
for (i = 0; i < n; i++) {
index = i;
for (j = i + 1; j < n; j++)
if (A[j][1] < A[index][1])
index = j;
temp = A[i][1]; A[i][1] =
A[index][1]; A[index][1]
= temp;
temp = A[i][0]; A[i][0] =
```

```
A[index][0]; A[index][0]
= temp;
}
A[0][2] = 0;
for (i = 1; i < n; i++) {
A[i][2] = 0;
for (j = 0; j < i; j++)
A[i][2] += A[j][1];
total += A[i][2];
}
avg_wt = (float)total / n;
total = 0;
printf("P BT WT TAT\n");
for (i = 0; i < n; i++) {
A[i][3] = A[i][1] + A[i][2];
total += A[i][3];
printf("P%d %d %d %d\n", A[i][0],A[i][1], A[i][2], A[i][3]);
}
avg_tat = (float)total / n;

printf("Average Waiting Time= %f", avg_wt);
printf("\nAverage Turnaround Time= %f", avg_tat);
}
```

OUTPUT:

```
Enter number of process: 5
Enter Burst Time:
P1: 10
P2: 6
P3: 7
P4: 4
P5: 5
P BT WT TAT
P4 4 0 4
P5 5 4 9
P2 6 9 15
P3 7 15 22
P1 10 22 32
Average Waiting Time= 10.000000
Average Turnaround Time= 16.400000
--------------------------------
Process exited after 25.67 seconds with return value 0
Press any key to continue . . .
```