3. Design a CPU scheduling program with C using First Come First Served

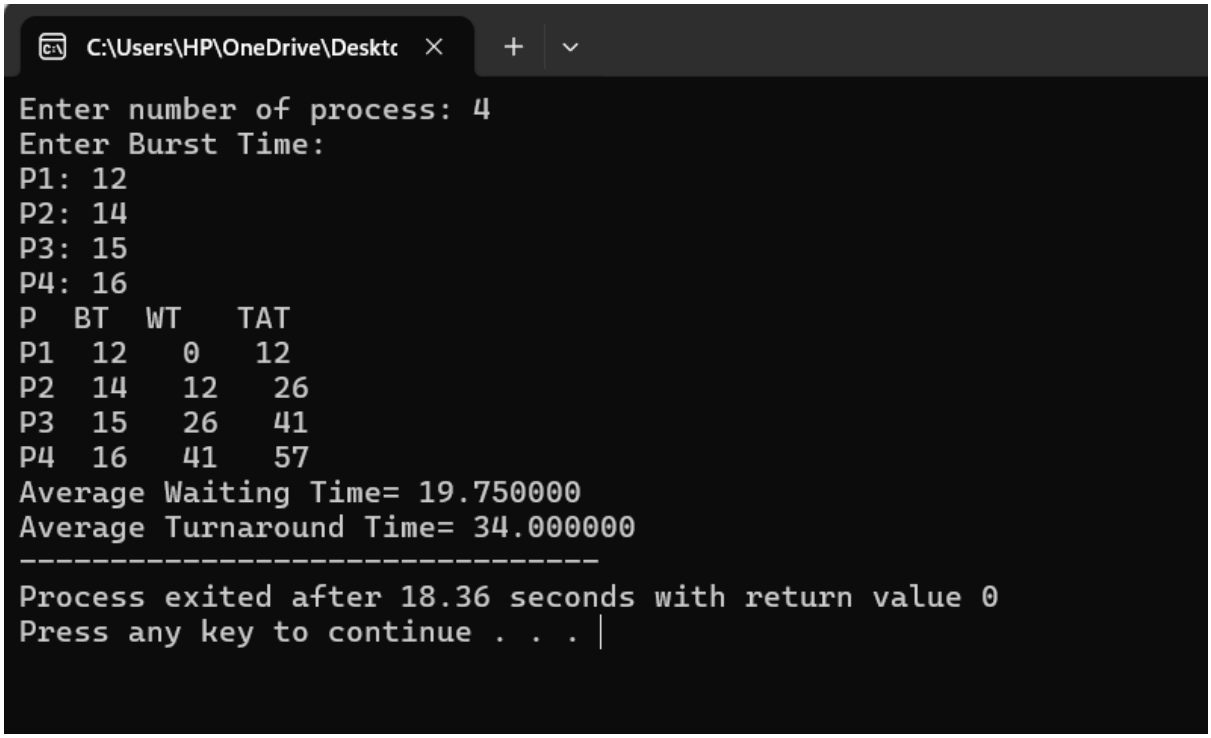
PROGRAM :

```
#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 :


C:\Users\HP\OneDrive\Desktc
Enter number of process: 4
Enter Burst Time:
P1: 12
P2: 14
P3: 15
P4: 16
P BT WT TAT
P1 12 0 12
P2 14 12 26
P3 15 26 41
P4 16 41 57
Average Waiting Time= 19.750000
Average Turnaround Time= 34.000000
Process exited after 18.36 seconds with return value 0
Press any key to continue . . .