Name- Khushi Negi
Course- Bsc. IT
Student ID- 20052109
Roll no - 2023062
Campus - Dehradun
Subject - Operating System Practical.

```
#include<stdio.h>
int main()
{
  int
bt[20], p[20], wt[20], tat[20], i, j, n=4, total=0, pos, temp;
  float avg_wt, avg_tat;
  printf("\nEnter Burst Time:\n");
 for(i=0; i<n; i++)
 {
   printf("p%d:",i+1);
   scanf("%d", &bt[i]);
  p[i]=i+1;

 }
  for(i=0; i<n; i++)
  {
   pos=i;
   for(j=i+1; j<n; j++)
   {
    if(bt[j]<bt[pos])
     pos=j;

  }
  temp=bt[i];
  bt[i]=bt[pos];
```


Khushi Negi

```
    bt[pos] = temp;
    temp = p[i];
    p[i] = p[pos];
    p[pos] = temp;
  }
  wt[0] = 0;
  for(i=1; i<n; i++)
  {
    wt[i] = 0;
    for(j=0; j<i; j++)
    wt[i] += bt[j];
    total += wt[i];
  }
  avg_wt = (float)total/n;
  total = 0;
  printf("\nPro\t BT\tWT\tTAT");
  for(i=0; i<n; i++)
  {
    tat[i] = bt[i] + wt[i];
    total += tat[i];
    printf("\np%d \t %d \t %d \t %d", p[i], bt[i], wt[i],
    tat[i]);
  }
  avg_tat = (float)total/n;
  printf("\n\nAverage waiting Time = %f", avg_wt);
  printf("\nAverage Turnaround Time = %f\n", avg_tat);
}
```

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Compile Result

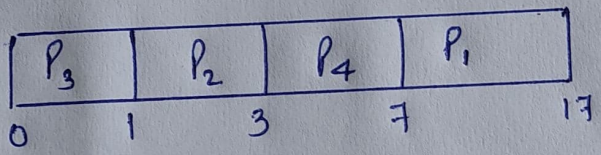
```
_Khushi negi_ Output of SJF
Enter Burst Time:
p1:10
p2:2
p3:1
p4:4

Pro         BT     WT        TAT
p3          1       0         1
p2          2       1         3
p4          4       3         7
p1          10      7         17

Average Waiting Time=2.750000
Average Turnaround Time=7.000000

[Process completed - press Enter]
```

Process	Arival Time	Burst Time
P_1	0	10
P_2	0	2
P_3	0	1
P_4	0	4

Turn Around Time = ?, waiting time = ?, avg T.T = ?, avg W.T = ?

Turn around time = CT − AT (CT => Completion Time)

WT = TAT − BT



Process	AT	BT	CT	TAT	WT
P_1	0	10	17	17	7
P_2	0	2	3	3	1
P_3	0	1	1	1	0
P_4	0	4	7	7	3

avg TAT = $\frac{28}{4}$ => 7 ans

avg WT = $\frac{11}{4}$ => 2.75 ans.

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