

## PROGRAM NUMBER : 04

### PROGRAM:

```
#include<stdio.h>

int main()
{
    int bt[20],p[20],wt[20],tat[20],i,j,n,total=0,pos,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",&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];
        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("Process Burst Time tWaiting TimeTurnaround Time\n");
for(i=0;i<n;i++)
{
tat[i]=bt[i]+wt[i];
total+=tat[i];
printf("p%dt\t %dt\t %dt\t%d\n",p[i],bt[i],wt[i],tat[i]);
}
avg_tat=(float)total/n;
printf("Average Waiting Time=%f",avg_wt);
printf("Average Turnaround Time=%fn",avg_tat);
}

```

## OUTPUT:

```
Enter number of process:5
Enter Burst Time:
p1:10
p2:5
p3:7
p4:4
p5:6
Processt Burst Time tWaiting TimetTurnaround Time
p4tt 4tt 0ttt4
p2tt 5tt 4ttt9
p5tt 6tt 9ttt15
p3tt 7tt 15ttt22
p1tt 10tt 22ttt32
Average Waiting Time=10.000000Average Turnaround Time=16.400000n
-----
Process exited after 9.215 seconds with return value 0
Press any key to continue . . . |
```