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NAME - DEEPIKA RAWAT
UNIVERSITY. ROLL. NO - 2023561

```
#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("\n 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;
```

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```
}
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("\n process\t Burst Time \twaiting
Time \tTurnaround time");
 for(i=0;i<n;i++)
{
  tat[i]=bt[i]+wt[i];
  total+=tat[i];
%d\t\t%d\t\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);
}
```

```c
#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("\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];
        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("\nProcess\t    Burst Time    \tWaiting Time\tTurnaround Time");
    for(i=0;i<n;i++)
    {
        tat[i]=bt[i]+wt[i];
        total+=tat[i];
        printf("\np%d\t\t  %d\t\t %d\t\t\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);
}
```

C
Demo.c

CODE | OUTPUT

```
Enter number of process:
Enter Burst Time:
p1:p2:p3:p4:
Process     Burst Time    Waiting Time
Turnaround Time
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
```