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```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int
```

```
    bt[20], p[20], wt[20], tat[20], i, j, n, total=0, pop, 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("\n process \t Burst Time \t waiting  
Time \t Turnaround time");
for (i = 0; i < n; i++)
{
    tat[i] = bt[i] + wt[i];
    total += tat[i];
    %d \t %d \t %d", p[i], bt[i], wt[i], tat[i];
}

avg_tat = (float) total / n;
printf("\n\n Average Waiting Time = %f", avg_wt);
printf("\n\n Average Turnaround time = %f \n", avg_tat);
}

```

```

1  #include<stdio.h>
2  int main()
3  {
4      int
bt[20],p[20],wt[20],tat[20],i,j,n,total=0,pos,temp;
5      float avg_wt,avg_tat;
6      printf("Enter number of process:");
7      scanf("%d",&n);
8      printf("\nEnter Burst Time:\n");
9      for(i=0;i<n;i++)
10     {
11         printf("p%d:",i+1);
12         scanf("%d",&bt[i]);
13         p[i]=i+1;
14     }
15     for(i=0;i<n;i++)
16     {
17         pos=i;
18         for(j=i+1;j<n;j++)
19         {
20             if(bt[j]<bt[pos])
21                 pos=j;
22         }
23         temp=bt[i];
24         bt[i]=bt[pos];
25         bt[pos]=temp;
26         temp=p[i];
27         p[i]=p[pos];
28         p[pos]=temp;
29     }
30     wt[0]=0;
31     for(i=1;i<n;i++)
32     {
33         wt[i]=0;
34         for(j=0;j<i;j++)
35             wt[i]+=bt[j];
36         total+=wt[i];
37     }
38     avg_wt=(float)total/n;
39     total=0;
40     printf("\nProcess\t      Burst Time      \tWaiting
Time\tTurnaround Time");
41     for(i=0;i<n;i++)
42     {
43         tat[i]=bt[i]+wt[i];
44         total+=tat[i];
45         printf("\np%d\t\t  %d\t\t
%d\t\t\t\t%d",p[i],bt[i],wt[i],tat[i]);
46     }
47     avg_tat=(float)total/n;
48     printf("\n\nAverage Waiting Time=%f",avg_wt);
49     printf("\nAverage Turnaround Time=%f\n",avg_tat);
50 }

```



# 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
```