

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

```
int main()
```

```
{
```

```
int bt[20],p[20],wt[20],tat[20],pr[20],i,j,n,total=0,pos,temp,avg_wt,avg_tat;
```

```
printf("Enter Total Number of Process:");
```

```
scanf("%d",&n);
```

```
printf("\nEnter Burst Time and Priority\n");
```

```
for(i=0;i<n;i++)
```

```
{
```

```
printf("\nP[%d]\n",i+1);
```

```
printf("Burst Time:");
```

```
scanf("%d",&bt[i]);
```

```
printf("Priority:");
```

```
scanf("%d",&pr[i]);
```

```
p[i]=i+1;
```

```
}
```

```
for(i=0;i<n;i++)
```

```
{
```

```
pos=i;
```

```
for(j=i+1;j<n;j++)
```

```
{
```

```
if(pr[j]<pr[pos])
```

```
pos=j;
```

```
}
```

```
temp=pr[i];
```

```
pr[i]=pr[pos];
```

```
pr[pos]=temp;
```

```
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=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=total/n; //average turnaround time
printf("\n\nAverage Waiting Time=%d",avg_wt);
printf("\n\nAverage Turnaround Time=%d\n",avg_tat);

return 0;
}

```

