```
#include<stdio.h>

struct block
{
 int pno;
 int bt,wt,tat,rem_bt;
}p[4];

void main()
{
 int i,qt,n,count=0,sq=0,temp;
 int total_wt=0,total_tat=0;
 float avg_wt,avg_tat;
 printf("\nEnter the no of Process : ");
 scanf("%d",&n);
 for(i=0;i<n;i++)
  {
   printf("\nProcess : %d",i+1);
   printf("\nEnter the Burst Time : ");
   scanf("%d",&p[i].bt);
   p[i].rem_bt=p[i].bt;
   p[i].pno=i+1;
  }
 printf("\nEnter the Quantum Time : ");
 scanf("%d",&qt);
 printf("\nProcess\tBurst Time\n");
 for(i=0;i<n;i++)
  {
   printf("\n%d\t%d",p[i].pno,p[i].bt);
  }
 while(1)
  {
   for(i=0,count=0;i<n;i++)
    {
     temp=qt;
     if(p[i].rem_bt==0)
      {
       count++;
       continue;
      }
```

```
if(p[i].rem_bt>qt)
      {
       p[i].rem_bt=p[i].rem_bt-qt;
      }
     else if(p[i].rem_bt>=0)
      {
       temp=p[i].rem_bt;
       p[i].rem_bt=0;
      }
     sq=sq+temp;
     p[i].tat=sq;
    }
   if(count==n)
    {
     break;
    }
  }

 printf("\nProcess\tBurst time\tWaiting Time\tTurn Around Time\n");

 for(i=0;i<n;i++)
  {
   p[i].wt=p[i].tat-p[i].bt;
   total_wt=total_wt+p[i].wt;
   total_tat=total_tat+p[i].tat;
   printf("\n%d\t%d\t\t%d\t\t%d",p[i].pno,p[i].bt,p[i].wt,p[i].tat);
  }
 avg_wt=(float)total_wt/n;
 avg_tat=(float)total_tat/n;
 printf("\nAverage Waiting Time : %f",avg_wt);
 printf("\nAverage Turn Around Time : %f",avg_tat);
 return;
}
```

```
#include<stdio.h>

struct block
{
 int pno;
 int bt,pr,wt,tat;
}p[4];

void main()
{
 int total_wt=0.0,total_tat=0.0;
 float avg_wt,avg_tat;
 int n,i,j,temp;
 printf("\nEnter the no of process : ");
 scanf("%d",&n);
 for(i=0;i<n;i++)
  {
   p[i].pno=i+1;
   printf("\nProcess : %d",i+1);
   printf("\nEnter the Burst time : ");
   scanf("%d",&p[i].bt);
   printf("Enter the Priority : ");
   scanf("%d",&p[i].pr);
  }
 printf("\nProcess\tBurst Time\tPriority\n");
 for(i=0;i<n;i++)
  {
   printf("\n%d\t%d\t%d",p[i].pno,p[i].bt,p[i].pr);
  }
 for(i=0;i<n;i++)
  {
   for(j=0;j<n-1;j++)
    {
     if(p[j].pr>p[j+1].pr)
      {
       temp=p[j].pr;
       p[j].pr=p[j+1].pr;
       p[j+1].pr=temp;
```

```
      temp=p[j].bt;
      p[j].bt=p[j+1].bt;
      p[j+1].bt=temp;


      temp=p[j].pno;
      p[j].pno=p[j+1].pno;
      p[j+1].pno=temp;
     }
   }
 }

 p[0].wt=0;
 p[0].tat=p[0].bt;
 total_wt=total_wt+p[0].wt;
 total_tat=total_tat+p[0].tat;
 for(i=1;i<n;i++)
  {
   p[i].wt=p[i-1].wt+p[i-1].bt;
   p[i].tat=p[i].wt+p[i].bt;
   total_wt=total_wt+p[i].wt;
   total_tat=total_tat+p[i].tat;
  }
 avg_wt=(float)total_wt/n;
 avg_tat=(float)total_tat/n;

 printf("\nProcess\tBurst Time\tPriority\tWaiting Time\tTurn Around Time\n");
 for(i=0;i<n;i++)
  {
   printf("\n%d\t%d\t\t%d\t\t\t%d\t\t\t%d",p[i].pno,p[i].bt,p[i].pr,p[i].wt,p[i].tat);
  }
 printf("\nAverage Waiting time : %f",avg_wt);
 printf("\nAverage Turn Around time : %f",avg_tat);
 return;
}
```

Enter the no of Process : 4

Process : 1
Enter the Burst Time : 10

Process : 2
Enter the Burst Time : 6

Process : 3
Enter the Burst Time : 2

Process : 4
Enter the Burst Time : 4

Enter the Quantum Time : 4

Process Burst Time

1 10
2 6
3 2
4 4

Process	Burst Time	Waiting Time	Turn Around Time
1	10	12	22
2	6	14	20
3	2	8	10
4	4	10	14

Average Waiting Time : 11.000000
Average Turn Around Time : 16.500000

```
Enter the no of process : 4

Process : 1
Enter the Burst time : 10
Enter the Priority : 3

Process : 2
Enter the Burst time : 6
Enter the Priority : 2

Process : 3
Enter the Burst time : 2
Enter the Priority : 1

Process : 4
Enter the Burst time : 4
Enter the Priority : 4

Process Burst Time      Priority

1               10              3
2               6               2
3               2               1
4               4               4
Process Burst Time      Priority        Waiting Time    Turn Around Time

3               2               1               0               2
2               6               2               2               8
1               10              3               8               18
4               4               4               18              22
Average Waiting time : 7.000000
Average Turn Around time : 12.500000
```