

```
1 |
2 | #include<stdio.h>
3 |
4 | int main()
5 | {
6 |
7 |     int cnt,j,n,t,remain,flag=0,tq;
8 |     int wt=0,tat=0,at[10],bt[10],rt[10];
9 |     printf("Enter Total Process:\t ");
10 |    scanf("%d",&n);
11 |    remain=n;
12 |    for(cnt=0;cnt<n;cnt++)
13 |    {
14 |        printf("Enter Arrival Time and Burst Time for Process Process Number %d :",cnt+1);
15 |        scanf("%d",&at[cnt]);
16 |        scanf("%d",&bt[cnt]);
17 |        rt[cnt]=bt[cnt];
18 |    }
19 |    printf("Enter Time Quantum:\t");
20 |    scanf("%d",&tq);
21 |    printf("\n\nProcess\t|Turnaround Time|Waiting Time\n\n");
22 |    for(t=0,cnt=0;remain!=0;)
23 |    {
24 |        if(rt[cnt]<=tq && rt[cnt]>0)
25 |        {
26 |            t+=rt[cnt];
27 |            rt[cnt]=0;
28 |            flag=1;
29 |        }
30 |        else if(rt[cnt]>0)
31 |        {
32 |            rt[cnt]-=tq;
33 |            t+=tq;
34 |        }
35 |        if(rt[cnt]==0 && flag==1)
36 |        {
37 |            remain--;
38 |            printf("P[%d]\t|\t%d\t|\t%d\n",cnt+1,t-at[cnt],t-at[cnt]-bt[cnt]);
39 |            wt=t-at[cnt]-bt[cnt];
40 |            tat=t-at[cnt];
41 |            flag=0;
42 |        }
43 |        if(cnt==n-1)
44 |            cnt=0;
45 |        else if(at[cnt+1]<=t)
46 |            cnt++;
47 |        else
48 |            cnt=0;
49 |    }
```

```
7 int cnt,j,n,t,remain,flag=0,tq;  
8 int wt=0,tat=0,at[10],bt[10],rt[10];  
9 printf("Enter Total Process:\t ");  
10 scanf("%d",&n);  
11 remain=n;  
12 for(cnt=0;cnt<n;cnt++)  
13 {  
14     printf("Enter Arrival Time and Burst Time for Process Process Number %d :",cnt+1);  
15     scanf("%d",&at[cnt]);  
16     scanf("%d",&bt[cnt]);  
17     rt[cnt]=bt[cnt];  
18 }  
19 printf("Enter Time Quantum:\t");  
20 scanf("%d",&tq);  
21 printf("\n\nProcess\t|Turnaround Time|Waiting Time\n\n");  
22 for(t=0,cnt=0;remain!=0;)  
23 {  
24     if(rt[cnt]<=tq && rt[cnt]>0)  
25     {  
26         t+=rt[cnt];  
27         rt[cnt]=0;  
28         flag=1;  
29     }  
30     else if(rt[cnt]>0)  
31     {  
32         rt[cnt]-=tq;  
33         t+=tq;  
34     }  
35     if(rt[cnt]==0 && flag==1)  
36     {  
37         remain--;  
38         printf("P[%d]\t|\t%d\t|\t%d\n",cnt+1,t-at[cnt],t-at[cnt]-bt[cnt]);  
39         wt+=t-at[cnt]-bt[cnt];  
40         tat+=t-at[cnt];  
41         flag=0;  
42     }  
43     if(cnt==n-1)  
44         cnt=0;  
45     else if(at[cnt+1]<=t)  
46         cnt++;  
47     else  
48         cnt=0;  
49 }  
50 printf("\nAverage Waiting Time= %f\n",wt*1.0/n);  
51 printf("Avg Turnaround Time = %f",tat*1.0/n);  
52  
53 return 0;  
54 }  
55
```

