#include<stdio.h>

#include<conio.h>

int main()

{

int count,j,n;

int time,remaining;

int flag=0,time\_quantum=10;

int waiting\_time=0,turn\_around\_time=0,arrival\_time[10],burst\_time[10],rt[10];

printf("\n\nEnter the Total number of Process:\t ");

scanf("%d",&n);

remaining=n;

for(count=0;count<n;count++)

{

printf("Enter Arrival Time and Burst Time for Process Process Number %d :",count+1);

scanf("%d",&arrival\_time[count]);

scanf("%d",&burst\_time[count]);

rt[count]=burst\_time[count];

}

printf("Enter Time Quantum:%d\t",time\_quantum);

printf("\n\nProcess\t|Turnaround Time|Waiting Time\n\n");

for(time=0,count=0;remaining!=0;)

{

if(rt[count]<=time\_quantum && rt[count]>0)

{

time+=rt[count];

rt[count]=0;

flag=1;

}

else if(rt[count]>0)

{

rt[count]-=time\_quantum;

time+=time\_quantum;

}

if(rt[count]==0 && flag==1)

{

remaining--;

printf("P[%d]\t|\t%d\t|\t%d\n",count+1,time-arrival\_time[count],time-arrival\_time[count]-burst\_time[count]);

waiting\_time+=time-arrival\_time[count]-burst\_time[count];

turn\_around\_time+=time-arrival\_time[count];

flag=0;

}

if(count==n-1)

count=0;

else if(arrival\_time[count+1]<=time)

count++;

else

count=0;

}

printf("\nAverage Waiting Time= %f\n",waiting\_time\*1.0/n);

printf("Avg Turnaround Time = %f",turn\_around\_time\*1.0/n);

return 0;

}