#include <stdio.h>

#include <stdlib.h>

void main()

{

int i,n,sum=0,count=0,y,quant,wt=0,tat=0,at[10],bt[10],temp[10];

float avg\_wt,avg\_tat;

printf("Total number of process in the system:");

scanf("%d",&n);

y = n;

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

{

printf("Enter the arrival and Burst time of the process [%d]\n",i+1);

printf("Arrival time is:\t");

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

printf("Burst time is :\t");

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

temp[i] = bt[i];

}

printf("Enter the time quantum for the process:\n");

scanf("%d",&quant);

printf("\n Process no \t\t burst time \t\t TAT \t\t waitingtime ");

for(i=0;y!=0;)

{

if(temp[i]<=quant && temp[i]>0){

sum = sum + temp[i];

temp[i]=0;

count=1;

}

else if(temp[i]>0){

temp[i]=temp[i]-quant;

sum=sum+quant;

}

if(temp[i]==0&&count==1){

y--;

printf("\nprocess no[%d]\t\t%d\t\t\t%d\t\t\t%d",i+1,bt[i],sum-at[i],sum-at[i]-bt[i]);

wt=wt+sum-at[i]-bt[i];

tat=tat+sum-at[i];

count=0;

}

if(i==n-1)

i=0;

else if(at[i+1]<=sum)

i++;

else

i=0;

}

avg\_wt=wt\*1.0/n;

avg\_tat=tat\*1.0/n;

printf("\nAverage Turn around time:%f",avg\_tat);

printf("\nAverage waiting time :%f",avg\_wt);

}

OUTPUT

Total number of process in the system:4

Enter the arrival and Burst time of the process [1]

Arrival time is: 0

Burst time is : 8

Enter the arrival and Burst time of the process [2]

Arrival time is: 1

Burst time is : 5

Enter the arrival and Burst time of the process [3]

Arrival time is: 2

Burst time is : 10

Enter the arrival and Burst time of the process [4]

Arrival time is: 3

Burst time is : 11

Enter the time quantum for the process:

6

Process no burst time TAT waitingtime

process no[2] 5 10 5

process no[1] 8 25 17

process no[3] 10 27 17

process no[4] 11 31 20

Average Turn around time:23.250000

Average waiting time :14.750000