//round robin scheduling

#include<stdio.h>

int main()

{

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

float awt, atat;

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

scanf("%d",&n);

y =n;

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

{

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

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

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

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

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

temp[i] = bt[i];

}

printf("Enter the Time Quantum for the process: \t");

scanf("%d", &q);

printf("\n Process No \t\t Burst Time \t\t TAT \t\t Waiting Time ");

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

{

if(temp[i] <= q && temp[i] > 0) //

{

sum = sum + temp[i];

temp[i] = 0;

cnt=1;

}

else if(temp[i] > 0)

{

temp[i] = temp[i] - q;

sum = sum + q;

}

if(temp[i]==0 && cnt==1)

{

y--; //decrement the process no.

printf("\nProcess No[%d] \t\t %d\t\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];

cnt =0;

}

if(i==n-1)

{

i=0;

}

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

{

i++;

}

else

{

i=0;

}

}

awt = wt \* 1.0/n;

atat= tat \* 1.0/n;

printf("\n Average Turn Around Time: \t%f", awt);

printf("\n Average Waiting Time: \t%f", atat);

}

Output:

