#include <stdio.h>

struct process

{

int WT,AT,BT,TAT,PT;

};

struct process a[10];

int main()

{

int n, temp[10],t,count=0,short\_p;

float total\_WT=0,total\_TAT=0,Avg\_WT,Avg\_TAT;

printf("Enter the number of process\n");

scanf("%d",&n);

printf("enter the arrival time,burst time and priority of the process\n");

printf("AT BT PT \n");

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

{

scanf("%d %d %d",& a[i].AT,& a[i].BT,& a[i].PT);

temp[i]=a[i].BT;

}

a[9].PT=10000;

for(t=0;count!=n;t++)

{

short\_p=9;

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

{

if(a[short\_p].PT>a[i].PT&&a[i].AT<=t&&a[i].BT>0)

{

short\_p=i;

}

}

a[short\_p].BT=a[short\_p].BT-1;

if(a[short\_p].BT==0)

{

count++;

a[short\_p].WT=t+1-a[short\_p].AT-temp[short\_p];

a[short\_p].TAT=t+1-a[short\_p].AT;

total\_WT=total\_WT+a[short\_p].WT;

total\_TAT=total\_TAT+a[short\_p].TAT;

}

}

Avg\_WT=total\_WT/n;

Avg\_TAT=total\_TAT/n;

printf("ID WT TAT \n");

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

{

printf("%d %d \t %d\n",i+1,a[i].WT,a[i].TAT);

}

printf("Avg waiting time of process is %f \n",Avg\_WT);

printf("Avg turn around time of process is %f \n",Avg\_TAT);

return 0;

}