#include<stdio.h>

int main()

{

int n,i,c,t,flag=0;

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

scanf("%d",&n);

int bt[n],at[n],tq=3,p[n],tat=0,wt=0,rt[n],r=n;

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

p[i]=i;

printf("\nEnter Arrival Time of p[%d] process",i+1);

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

printf("Enter Burst Time of p[%d] process",i+1);

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

rt[i]=bt[i];

}

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

for(t=0,c=0;r!=0;)

{

if(rt[c]<=tq&&rt[c]>0)

{

t=t+rt[c];

rt[c]=0;

flag=1;

}

else if(rt[c]>0)

{

rt[c]-=tq;

t=t+tq;

}

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

{

r--;

printf("P[%d]\t|\t%d\t|\t%d\n",c+1,t-at[c],t-at[c]-bt[c]);

wt+=t-at[c]-bt[c];

tat+=t-at[c];

flag=0;

}

if(c==n-1)

c=0;

else if(at[c+1]<=t)

c++;

else

c=0;

}

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

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

}