#include<stdio.h>

int main()

{

int at[10],bt[10],rt[10],endTime,i,smallest;

int remain=0,n,time,sum\_wait=0,sum\_turnaround=0, sumet=0;

printf("Enter no of Processes : ");

scanf("%d",&n);

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

{

printf("Enter arrival time for Process P%d : ",i);

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

printf("Enter burst time for Process P%d : ",i);

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

rt[i]=bt[i];

}

printf("\n\nProcess\tArrival Time Burst Time Turnaround Time Waiting Time Finishing Time\n\n");

rt[9]=9999;

for(time=0; remain!=n; time++)

{

smallest=9;

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

{

if(at[i]<=time && rt[i]<rt[smallest] && rt[i]>0)

{

smallest=i;

}

}

rt[smallest]--;

if(rt[smallest]==0)

{

remain++;

endTime=time+1;

printf("\nP[%d]\t\t%d\t\t%d\t%d\t\t%d\t\t%d",smallest+1,at[smallest],bt[smallest],endTime-at[smallest],endTime-bt[smallest]-at[smallest],endTime);

sum\_wait+=endTime-bt[smallest]-at[smallest];

sum\_turnaround+=endTime-at[smallest];

sumet+=endTime;

}

}

printf("\n\nAverage waiting time = %f",sum\_wait\*1.0/n);

printf("\nAverage Turnaround time = %f",sum\_turnaround\*1.0/n);

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

return 0;

}

OUTPUT

Enter no of Processes : 4

Enter arrival time for Process P0 : 0

Enter burst time for Process P0 : 5

Enter arrival time for Process P1 : 1

Enter burst time for Process P1 : 3

Enter arrival time for Process P2 : 2

Enter burst time for Process P2 : 8

Enter arrival time for Process P3 : 4

Enter burst time for Process P3 : 6

Process Arrival Time Burst Time Turnaround Time Waiting Time Finishing Time

P[2] 1 3 3 0 4

P[1] 0 5 8 3 8

P[4] 4 6 10 4 14

P[3] 2 8 20 12 22

Average waiting time = 4.750000

Average Turnaround time = 10.250000

Average Finishing Time = 12.000000