#include <stdio.h>

int main(){

int at[10],bt[10],temp[10],wt1[10],tt1[10];

int i,small,count=0,time,limit;

int wt = 0,tt = 0,end;

printf("\nEnter the Total Number of Processes:\t");

scanf("%d", &limit);

printf("\nEnter Details of %d Processes\n", limit);

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

{

printf("\nEnter Arrival Time:\t");

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

printf("Enter Burst Time:\t");

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

temp[i] = bt[i];

}

bt[9] = 9999;

for(time = 0; count != limit; time++){

small = 9;

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

if(at[i] <= time && bt[i] < bt[small] && bt[i] > 0)

small = i;

}

bt[small]--;

if(bt[small] == 0){

count++;

end = time + 1;

wt = wt + end - at[small] - temp[small];

tt = tt + end - at[small];

wt1[small] = end - at[small] - temp[small];

tt1[small] = end -at[small];

}

}

printf("\nprocess burst\_time waiting\_time turnaround\_time\n");

for(int i = 0;i<limit;i++){

printf(" p[%d] %d %d %d \n" ,i,temp[i],wt1[i],tt1[i]);

}

printf("\nAverage Waiting Time: %d\n", wt/limit);

printf("Average Turnaround Time: %d\n", tt/limit);

return 0;

}