#include<stdio.h>

int main()

{

int process[20],burst\_time[20],waiting\_time[20],turn\_a\_time[20],priority[20],i,j,n,total=0,pos,temp;

float avg\_wt,avg\_tat;

printf("Enter the number of Processes:");

scanf("%d",&n);

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

{

printf("Enter the Burst Time and Priority for P%d:",i+1);

scanf("%d %d",&burst\_time[i],&priority[i]);

process[i]=i+1;

}

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

{

pos=i;

for(j=i+1;j<n;j++)

{

if(priority[j]<priority[pos])

pos=j;

}

temp=priority[i];

priority[i]=priority[pos];

priority[pos]=temp;

temp=burst\_time[i];

burst\_time[i]=burst\_time[pos];

burst\_time[pos]=temp;

temp=process[i];

process[i]=process[pos];

process[pos]=temp;

}

waiting\_time[0]=0;

for(i=1;i<n;i++)

{

waiting\_time[i]=0;

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

waiting\_time[i]+=burst\_time[j];

total+=waiting\_time[i];

}

avg\_wt=(float)total/n;

total=0;

printf("\nProcess No\tPriority\tBurst Time\tWaiting Time\tTurn Around Time");

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

{

turn\_a\_time[i]=burst\_time[i]+waiting\_time[i];

total+=turn\_a\_time[i];

printf("\nP%d\t\t %d\t\t %d\t\t %d\t\t\t%d",process[i],priority[i],burst\_time[i],waiting\_time[i],turn\_a\_time[i]);

}

avg\_tat=(float)total/n;

printf("\n\nAverage Waiting Time=%.2f",avg\_wt);

printf("\nAverage Turnaround Time=%.2f\n",avg\_tat);

return 0;

}