#include<stdio.h>

void solution()

{

int burst\_time[20],p[20];

int wt[20],turn\_around\_time[20],pr[20];

int i,j,n,total=0,ps,tp,avg\_wt,avg\_turn\_around\_time;

printf("Enter the Total No. of Process:");

scanf("%d",&n);

printf("\nEnter the Burst Time and Priority\n");

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

{

printf("\nP[%d]\n",i+1);

printf("Burst Time:");

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

printf("Priority:");

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

p[i]=i+1;

}

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

{

ps=i;

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

{

if(pr[j]<pr[ps])

ps=j;

}

tp=pr[i];

pr[i]=pr[ps];

pr[ps]=tp;

tp=burst\_time[i];

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

burst\_time[ps]=tp;

tp=p[i];

p[i]=p[ps];

p[ps]=tp;

}

wt[0]=0;

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

{

wt[i]=0;

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

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

total+=wt[i];

}

avg\_wt=total/n;

total=0;

printf("\nProcess\t Burst Time \tWaiting Time\tTurnaround Time");

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

{

turn\_around\_time[i]=burst\_time[i]+wt[i];

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

printf("\nP[%d]\t\t %d\t\t %d\t\t\t%d",p[i],burst\_time[i],wt[i],turn\_around\_time[i]);

}

avg\_turn\_around\_time=total/n; //average TAT

printf("\n\nAverage Waiting Time=%d",avg\_wt);

printf("\nAverage TAT=%d\n",avg\_turn\_around\_time);

return 0;

}

int main()

{

solution();

}