//priority disk scheduling

#include<stdio.h>

int main()

{

int p[20],bt[10],wt[20],tat[10],i,j,position,temp,twt,ttat,n,priority[15],a,b;

float awt,atat;

printf("\nenter the number of processs:");

scanf("%d",&n);

printf("\nenter the burst time:");

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

{

printf("\np%d=",i+1);

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

p[i]=i+1;

}

printf("enter the priority for process");

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

{

printf("\np%d=",i+1);

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

p[i]=i+1;

}

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

{

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

{

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

{

temp=priority[i];

priority[i]=priority[j];

priority[j]=temp;

temp=p[i];

p[i]=p[j];

p[j]=temp;

temp=bt[i];

bt[i]=bt[j];

bt[j]=temp;

}

}

}

wt[0]=0;

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

{

wt[i]=bt[i-1]+wt[i-1];

twt+=wt[i];

}

awt=float(twt/n);

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

{

tat[i]=bt[i]+wt[i];

ttat+=tat[i];

}

atat=float(ttat/n);

printf("\nProcess ID\t Burst time\t priority\t Waiting time\t Turn around time");

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

{

printf("\np%d\t\t",p[i]);

printf("%d\t\t",bt[i]);

printf("%d\t\t",priority[i]);

printf("%d\t\t",wt[i]);

printf("%d\t\t",tat[i]);

printf("\n");

}

printf("\naverage waiting time:%.3f",awt);

printf("\naverage turn around time:%.3f",atat);

}

Output:

