#SHORTEST JOB FIRST

#include<iostream>

using namespace std;

int main()

{

int bt[20],p[20],wt[20],tat[20],i,j,n,total=0,pos,temp;

float avwt,avtat;

cout<<"Enter number of process:";

cin>>n;

cout<<("nEnter Burst Time:\n");

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

{

cout<<"\n[P"<<i+1<<"]";

cin>>bt[i];

}

//sorting of burst times

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

{

pos=i;

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

{

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

pos=j;

}

temp=bt[i];

bt[i]=bt[pos];

bt[pos]=temp;

temp=p[i];

p[i]=p[pos];

p[pos]=temp;

}

wt[0]=0;

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

{

wt[i]=0;

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

wt[i]+=bt[j];

}

cout<<"\nProcess\t\tBurst Time\tTurn Around Time\t Weighting time";

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

{

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

avtat+=tat[i];

avwt+=wt[i];

cout<<"\nP["<<i+1<<"]"<<" "<<bt[i]<<" "<<tat[i]<<" "<<wt[i];

}

avtat/=i;

avwt/=i;

cout<<"\naverage turn around time "<<avtat;

cout<<"\naverage weighting time"<<avwt;

return 0;

}