**#include<iostream>**

**#include<bits/stdc++.h>**

**using namespace std;**

**int main()**

**{**

**int n;**

**cin>>n;**

**vector<int> pseq(n);**

**vector<int> pbrst(n);**

**vector <int> wait\_time(n);**

**int t\_total=0;**

**float t\_avg;**

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

**{**

**cin>>pseq[i];**

**}**

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

**{**

**cin>>pbrst[pseq[i]-1];**

**}**

**wait\_time[0]=0;**

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

**{**

**wait\_time[i]=wait\_time[i-1]+pbrst[i-1]; t\_total+= wait\_time[i];**

**}**

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

**{**

**cout<<wait\_time[pseq[i]-1]<<" ";**

**}**

**t\_avg= (float)t\_total/ (float)n; cout<<"\n Average time:"<<t\_avg;**

**return 0;**

**}**