

```

#include<bits/stdc++.h>
using namespace std;
const int big= 99999999;

int m[100][100];
int s[100][100];
int d[100];

int MCM(int i, int j){
    if(i==j) return 0;
    if(m[i][j]!=99999 ) return m[i][j];
    int cost= 99999999;
    for(int k=i; k< j; k++){
        cost= MCM(i,k) + MCM(k+1,j)+ d[i-1]*d[k]*d[j];
        if(cost < m[i][j]){
            m[i][j]= cost;
            //cout<<m[i][j]<<endl;
            s[i][j]= k;
        }
    }
    return m[i][j];
}

int main(){
    int n;
    int row[100], col[100];
    cin>>n;

    for(int i=0; i<n; i++){
        cin>>row[i]>>col[i];
        d[i]=row[i];
        d[i+1]=col[i];
    }
    for(int i=0; i<=n; i++){
        for(int j=0; j<=n; j++){
            m[i][j]= 99999;
            s[i][j]= -1;
        }
    }
    cout<<MCM(1,4)<<endl;
    cout<<s[1][4]<<endl;
}
/*
4
5 4
4 6
6 2
2 7
*/

```