

T. Matrix

time limit per test: 1 second
memory limit per test: 256 megabytes

Given a number N and a $2D$ array A of size $N \times N$. Print the absolute difference between the summation of its two diagonals, primary diagonal and secondary diagonal.

Input

First line contains a number N ($1 \leq N \leq 100$) described above.

int n; cin >>n;

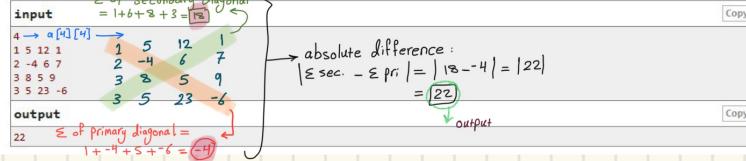
Each of the next N lines will contain N numbers ($-100 \leq A_{ij} \leq 100$).

int a[n][n];

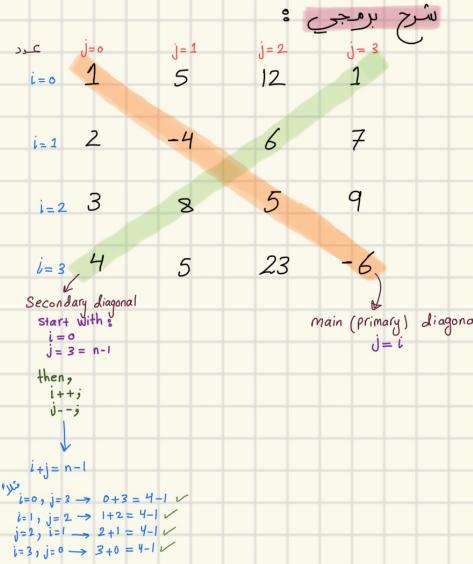
Output

Print the absolute difference between the summation of the matrix main diagonals.

Example



($N \times N$) عدد المصفوف = عدد الأعمدة
نرمز للصنف بـ i والأعمدة بـ j



→ مهم جداً : علامة عناصر قطر الرئيسي : } → for Matrix of $N \times N$ Size
 $i=j$: علامة عناصر قطر الثانوي :
 $i+j=n-1$:

Solution :

By Juman.Salahat, contest: Sheet #3 (Arrays), problem: (T) Matrix , Accepted, #, Copy

```
#include <bits/stdc++.h>
using namespace std;
int main()
{
    int n; cin>>n;
    int a[n][n];

    int SumPri=0;
    int SumSec=0;

    // إدخال عناصر المصفوفة
    // وإيجاد مجموع عناصر قطر الرئيسي ، ومجموع عناصر قطر الثانوي
    for(int i=0;i<n;i++)
    {
        for(int j=0;j<n;j++)
        {
            cin>>a[i][j];
            if(i==j) SumPri+=a[i][j];
            if(i+j==n-1) SumSec+=a[i][j];
        }
    }

    // إيجاد المطلوب :
    // -> the absolute difference between the summation of the matrix main diagonals
    int result=abs(SumPri-SumSec);
    cout<<result;
    return 0;
}
```