
Matrix

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Given a number N and a 2D array A of size $N * N$. 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.

Each of the next N lines will contain N numbers ($-100 \leq A_i \leq 100$).

Output

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

Example

standard input	standard output
4 1 5 12 1 2 -4 6 7 3 8 5 9 3 5 23 -6	22

Note

First Example :

1	5	12	1
2	-4	6	7
3	8	5	9
3	5	23	-6

Main Diagonal Elements with colors red :

1 , -4 , 5, -6 and it's summation **-4** .

Secondary Diagonal Elements with colors green :

1 , 6, 8,3 and it's summation **18**.

So the answer is **| -4 - 18 | = 22**.