

# Diagonal Difference



## Problem Statement

You are given a square matrix of size  $N \times N$ . Calculate the absolute difference of the sums across the two main diagonals.

## Input Format

The first line contains a single integer  $N$ . The next  $N$  lines contain  $N$  integers describing the matrix.

## Constraints

$1 \leq N \leq 100$

$-100 \leq A[i] \leq 100$

## Output Format

Output a single integer equal to the absolute difference in the the sums across the diagonals.

## Sample Input

```
3
11 2 4
4 5 6
10 8 -12
```

## Sample Output

```
15
```

## Explanation

The first diagonal of the matrix is:

```
11
 5
  -12
```

Sum across the first diagonal =  $11+5-12= 4$

The second diagonal of the matrix is:

```
 4
 5
10
```

Sum across the second diagonal =  $4+5+10 = 19$

Difference:  $|4-19| = 15$