

# Diagonal Difference



Given a square matrix of size  $N \times N$ , calculate the absolute difference between the sums of its diagonals.

## Input Format

The first line contains a single integer,  $N$ . The next  $N$  lines denote the matrix's rows, with each line containing  $N$  space-separated integers describing the columns.

## Constraints

- $-100 \leq \text{Elements in the matrix} \leq 100$

## Output Format

Print the absolute difference between the two sums of the matrix's diagonals as a single integer.

## Sample Input

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

## Sample Output

```
15
```

## Explanation

The primary diagonal is:

```
11
 5
-12
```

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

The secondary diagonal is:

```
 4
 5
10
```

Sum across the secondary diagonal:  $4 + 5 + 10 = 19$

Difference:  $|4 - 19| = 15$

**Note:**  $|x|$  is [absolute value](#) function