

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