# **Diagonal Difference**

Given a square matrix, calculate the absolute difference between the sums of its diagonals.

For example, the square matrix *arr* is shown below:

```
1 2 3
4 5 6
9 8 9
```

The left-to-right diagonal = 1 + 5 + 9 = 15. The right to left diagonal = 3 + 5 + 9 = 17. Their absolute difference is |15 - 17| = 2.

# Function description

Complete the *diagonalDifference* function in the editor below.

diagonalDifference takes the following parameter:

• *int arr[n][m]*: an array of integers

#### Return

• int: the absolute diagonal difference

#### **Input Format**

The first line contains a single integer, n, the number of rows and columns in the square matrix arr. Each of the next n lines describes a row, arr[i], and consists of n space-separated integers arr[i][j].

## Constraints

•  $-100 \leq arr[i][j] \leq 100$ 

## **Output Format**

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

#### Sample Input

#### 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 = 19Difference: |4 - 19| = 15

**Note:** |x| is the absolute value of x