**Title**

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**Diagonal Difference**

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**Description**

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

**For example, the square matrix 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 function diagonalDifference 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.

Each of the next n lines describes a row,arr[i], and consists of space-separated integers arr[i][j].

**Constraints**

-100 <= arr[i][j] <= 100

**Output Format**

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

**Sample Input**

3

11 2 4

4 5 6

10 8 -12

**Sample Output**

15

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**Code**

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package main

import(

    "fmt"

    "math"

)

func main(){

    arr := [][]int32{{11, 2, 4},{4, 5, 6},{10, 8, -12}}

    var res int32

    res = diagonalDifference(arr)

    fmt.Println(res)

}

func diagonalDifference(arr [][]int32) int32 {

    var leftsum int32 = 0

    var rightsum int32 = 0

    for i :=0; i< len(arr); i++{

        for j := 0; j< len(arr[0]);j++{

            if i==j{

                leftsum += arr[i][j]

            }

            if i+j == len(arr)-1{

                rightsum += arr[i][j]

            }

        }

    }

    return int32(math.Abs(float64(leftsum) - float64(rightsum)))

}

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