


 Description

 Solution

 Discuss (999+)

 Submissions

1572. Matrix Diagonal Sum

Easy

 953

 20

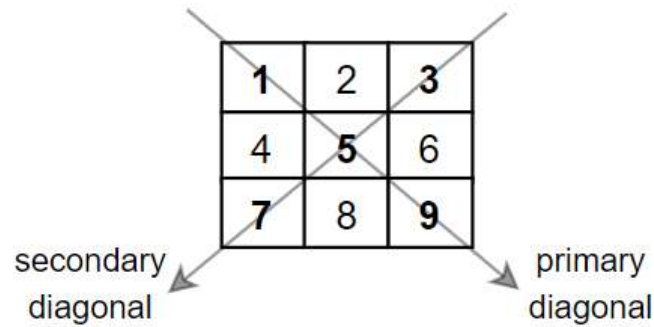
 Add to List

 Share

Given a square matrix `mat` , return the sum of the matrix diagonals.

Only include the sum of all the elements on the primary diagonal and all the elements on the secondary diagonal that are not part of the primary diagonal.

Example 1:



Input: `mat = [[1,2,3],`
 `[4,5,6],`
 `[7,8,9]]`

Output: 25
Explanation: Diagonals sum: 1 + 5 + 9 + 3 + 7 = 25
Notice that element `mat[1][1] = 5` is counted only once.

Example 2:

Input: `mat = [[1,1,1,1],`
 `[1,1,1,1],`
 `[1,1,1,1],`
 `[1,1,1,1]]`

Output: 8

Example 3:

Input: `mat = [[5]]`
Output: 5

Constraints:

i

Java

Autocomplete

i

{ }

↺

⚙

⌵


```
1  class Solution {
2      public int diagonalSum(int[][] mat) {
3
4          int matrixDimention = mat.length;
5          int sumOfPrimaryDiagonal = 0;
6          int sumOfSecondaryDiagonal = 0;
7
8          for(int i = 0 ; i < matrixDimention; i++){
9              sumOfPrimaryDiagonal += mat[i][i];
10             sumOfSecondaryDiagonal += mat[i][matrixDimention - i - 1];
11         }
12
13         return matrixDimention % 2 != 0 ? (sumOfPrimaryDiagonal +
14             sumOfSecondaryDiagonal - mat[(matrixDimention - 1)/2]) : (sumOfPrimaryDiagonal +
15             sumOfSecondaryDiagonal);
16     }
17 }
```

Your previous code was restored from your local storage. [Reset to default](#)

Testcase

Run Code Result

Debugger 

	Accepted	Runtime: 0 ms	
Your input	<code>[[1,2,3],[4,5,6],[7,8,9]]</code>		
Output	<code>25</code>	<input type="checkbox"/> Diff	
Expected	<code>25</code>		