Problem 1572: Matrix Diagonal Sum

Problem Information

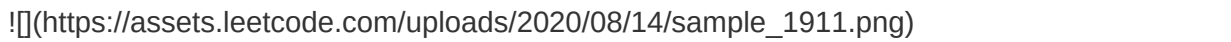
Difficulty: Easy
Acceptance Rate: 83.94%
Paid Only: No
Tags: Array, Matrix

Problem Description

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:

* `n == mat.length == mat[i].length` * `1 <= n <= 100` * `1 <= mat[i][j] <= 100`

Code Snippets

C++:

```
class Solution {
public:
int diagonalSum(vector<vector<int>>& mat) {

}
};
```

Java:

```
class Solution {
public int diagonalSum(int[][] mat) {

}
}
```

Python3:

```
class Solution:
def diagonalSum(self, mat: List[List[int]]) -> int:
```