

5202. Largest Magic Square

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A $k \times k$ **magic square** is a $k \times k$ grid filled with integers such that every row sum, every column sum, and both diagonal sums are **all equal**. The integers in the magic square **do not have to be distinct**. Every 1×1 grid is trivially a **magic square**.

Given an $m \times n$ integer grid, return the **size** (i.e., the side length k) of the **largest magic square** that can be found within this grid.

Example 1:

7	1	4	5	6
2	5	1	6	4
1	5	4	3	2
1	2	7	3	4

Input: grid = [[7,1,4,5,6],[2,5,1,6,4],[1,5,4,3,2],[1,2,7,3,4]]**Output:** 3**Explanation:** The largest magic square has a size of 3.

Every row sum, column sum, and diagonal sum of this magic square is equal to 12.

- Row sums: $5+1+6 = 5+4+3 = 2+7+3 = 12$ - Column sums: $5+5+2 = 1+4+7 = 6+3+3 = 12$ - Diagonal sums: $5+4+3 = 6+4+2 = 12$

Example 2:

5	1	3	1
9	3	3	1
1	3	3	8

Input: grid = [[5,1,3,1],[9,3,3,1],[1,3,3,8]]**Output:** 2

User Accepted: 0

User Tried: 0

Total Accepted: 0

Total Submissions: 0

Difficulty: Medium

Constraints:

- $m == \text{grid.length}$
- $n == \text{grid}[i].\text{length}$
- $1 \leq m, n \leq 50$
- $1 \leq \text{grid}[i][j] \leq 10^6$

JavaScript



```
1 /**
2  * @param {number[][]} grid
3  * @return {number}
4  */
5 var largestMagicSquare = function(grid) {
6
7  };
```

☐ Custom Testcase

Use Example Testcases

Run

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