# 840. Magic Squares In Grid

## Description

A 3 x 3 magic square is a 3 x 3 grid filled with distinct numbers **from** 1 **to** 9 such that each row, column, and both diagonals all have the same sum.

Given a  $[row \times col]$  grid of integers, how many  $[3 \times 3]$  "magic square" subgrids are there? (Each subgrid is contiguous).

#### Example 1:

4	3	8	4
9	5	1	9
2	7	6	2

**Input:** grid = [[4,3,8,4],[9,5,1,9],[2,7,6,2]]

Output: 1
Explanation:

The following subgrid is a  $3 \times 3$  magic square:

4	3	8
9	5	1
2	7	6

while this one is not:

3	8	4
5	1	9
7	6	2

In total, there is only one magic square inside the given grid.

#### Example 2:

Input: grid = [[8]]
Output: 0

### **Constraints:**

- row == grid.length
- col == grid[i].length
- 1 <= row, col <= 10
- 0 <= grid[i][j] <= 15