

967. Minimum Falling Path Sum

Difficulty : Medium

<https://leetcode.com/problems/minimum-falling-path-sum>

Given an $n \times n$ array of integers `matrix`, return the **minimum sum** of any **falling path** through `matrix`.

A **falling path** starts at any element in the first row and chooses the element in the next row that is either directly below or diagonally left/right. Specifically, the next element from position (row, col) will be $(row + 1, col - 1)$, $(row + 1, col)$, or $(row + 1, col + 1)$.

Example 1:

2	1	3
6	5	4
7	8	9

2	1	3
6	5	4
7	8	9

2	1	3
6	5	4
7	8	9

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

Output: 13

Explanation: There are two falling paths with a minimum sum as shown.

Example 2:

-19	57
-40	-5

-19	57
-40	-5

Input: `matrix = [[-19,57],[-40,-5]]`

Output: -59

Explanation: The falling path with a minimum sum is shown.

Constraints:

- `n == matrix.length == matrix[i].length`
- `1 <= n <= 100`
- `-100 <= matrix[i][j] <= 100`