# 931. Minimum Falling Path Sum

# Description

Given an [n x 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		2	1	3
6	5	4		6	5	4
7	8	9		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