

2319. Check if Matrix Is X-Matrix

Description

A square matrix is said to be an **X-Matrix** if **both** of the following conditions hold:

- 1. All the elements in the diagonals of the matrix are **non-zero**.
- 2. All other elements are 0.

Given a 2D integer array `grid` of size `n x n` representing a square matrix, return `true` if `grid` is an X-Matrix. Otherwise, return `false`.

Example 1:

2	0	0	1
0	3	1	0
0	5	2	0
4	0	0	2

Input: `grid = [[2,0,0,1],[0,3,1,0],[0,5,2,0],[4,0,0,2]]`
Output: `true`
Explanation: Refer to the diagram above.
An X-Matrix should have the green elements (diagonals) be non-zero and the red elements be 0.
Thus, `grid` is an X-Matrix.

Example 2:

5	7	0
0	3	1
0	5	0

Input: `grid = [[5,7,0],[0,3,1],[0,5,0]]`
Output: `false`
Explanation: Refer to the diagram above.
An X-Matrix should have the green elements (diagonals) be non-zero and the red elements be 0.
Thus, `grid` is not an X-Matrix.

Constraints:

- `n == grid.length == grid[i].length`
- `3 <= n <= 100`
- `0 <= grid[i][j] <= 105`

