Problem 2133: Check if Every Row and Column Contains All Numbers

Problem Information

Difficulty: Easy
Acceptance Rate: 53.70%
Paid Only: No
Tags: Array, Hash Table, Matrix

Problem Description

An `n x n` matrix is **valid** if every row and every column contains **all** the integers from `1` to `n` (**inclusive**).

Given an `n x n` integer matrix `matrix`, return `true` _if the matrix is**valid**._ Otherwise, return `false`.

Example 1:

Input: matrix = [[1,2,3],[3,1,2],[2,3,1]] **Output:** true **Explanation:** In this case, n = 3, and every row and column contains the numbers 1, 2, and 3. Hence, we return true.

Example 2:

Input: matrix = [[1,1,1],[1,2,3],[1,2,3]] **Output:** false **Explanation:** In this case, n = 3, but the first row and the first column do not contain the numbers 2 or 3. Hence, we return false.

Constraints:

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

Code Snippets

C++:

```
class Solution {
public:
bool checkValid(vector<vector<int>>& matrix) {

}
};
```

Java:

```
class Solution {
public boolean checkValid(int[][] matrix) {

}
}
```

Python3:

```
class Solution:
def checkValid(self, matrix: List[List[int]]) -> bool:
```