Problem 2718: Sum of Matrix After Queries

Problem Information

Difficulty: Medium
Acceptance Rate: 31.62%
Paid Only: No
Tags: Array, Hash Table

Problem Description

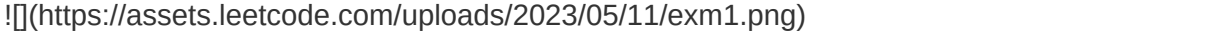
You are given an integer `n` and a **0-indexed** **2D array** `queries` where `queries[i] = [typei, indexi, vali]`.

Initially, there is a **0-indexed** `n x n` matrix filled with `0`'s. For each query, you must apply one of the following changes:

* if `typei == 0`, set the values in the row with `indexi` to `vali`, overwriting any previous values. * if `typei == 1`, set the values in the column with `indexi` to `vali`, overwriting any previous values.

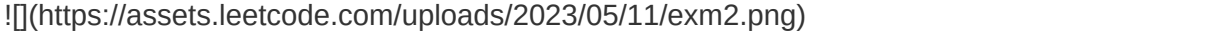
Return _the sum of integers in the matrix after all queries are applied_.

Example 1:



Input: n = 3, queries = [[0,0,1],[1,2,2],[0,2,3],[1,0,4]] **Output:** 23 **Explanation:** The image above describes the matrix after each query. The sum of the matrix after all queries are applied is 23.

Example 2:



Input: n = 3, queries = [[0,0,4],[0,1,2],[1,0,1],[0,2,3],[1,2,1]] **Output:** 17 **Explanation:** The image above describes the matrix after each query. The sum of the matrix after all

queries are applied is 17.

Constraints:

* `1 <= n <= 104` * `1 <= queries.length <= 5 * 104` * `queries[i].length == 3` * `0 <= typei <= 1` * `0 <= indexi < n` * `0 <= vali <= 105`

Code Snippets

C++:

```
class Solution {
public:
long long matrixSumQueries(int n, vector<vector<int>>& queries) {

}
};
```

Java:

```
class Solution {
public long matrixSumQueries(int n, int[][] queries) {

}
}
```

Python3:

```
class Solution:
def matrixSumQueries(self, n: int, queries: List[List[int]]) -> int:
```