Sum of Matrix After Queries

You are given an integer n and a **0-indexed 2D array** queries where queries[i] = [type_i, index_i, val_i].

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

- if type_i == 0, set the values in the row with index_i to val_i, overwriting any previous values.
- if type_i == 1, set the values in the column with index_i to val_i, overwriting any previous values.

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

Example 1:

Initial Matrix		Query 0			Query 1			Query 2			Query 3				
0	0	0	1	1	1	1	1	2		1	1	2	4	1	2
0	0	0	0	0	0	0	0	2		0	0	2	4	0	2
0	0	0	0	0	0	0	0	2		3	3	3	4	3	3

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:

Init	ial Ma	trix	Ç	uery (0	Query 1			
0	0	0	4	4	4	4	4	4	
0	0	0	0	0	0	2	2	2	
0	0	0	0	0	0	0	0	0	

ς	Query :	2	Query 3					
	4	4	1	4	4			
	2	2	1	2	2			
	0	0	3	3	3			

Query 4

1

1

1

1	4	1
1	2	1
3	3	1

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 th e matrix after all queries are applied is 17.

Constraints:

- 1 <= n <= 104
- 1 <= queries.length <= 5 * 104
- queries[i].length == 3
- 0 <= type_i <= 1
- 0 <= index_i < n
- 0 <= val_i <= 10⁵