2536. Increment Submatrices by One

Description

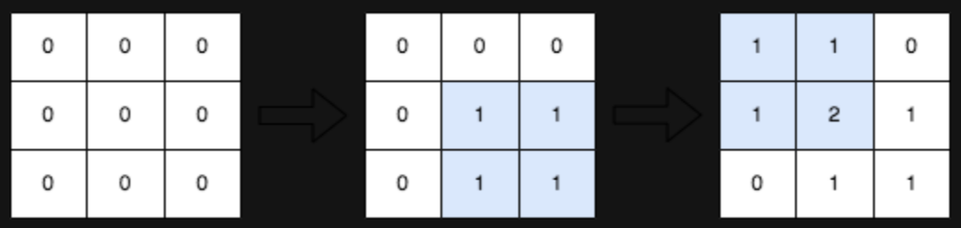
You are given a positive integer `n`, indicating that we initially have an `n x n` **0-indexed** integer matrix `mat` filled with zeroes.

You are also given a 2D integer array `query`. For each `query[i] = [row1 i, col1 i, row2 i, col2 i]`, you should do the following operation:

- Add `1` to **every element** in the submatrix with the **top left** corner `(row1 i, col1 i)` and the **bottom right** corner `(row2 i, col2 i)`. That is, add `1` to `mat[x][y]` for all `row1 i <= x <= row2 i` and `col1 i <= y <= col2 i`.

Return *the matrix* `mat` *after performing every query.*

Example 1:




```
Input: n = 3, queries = [[1,1,2,2],[0,0,1,1]]
Output: [[1,1,0],[1,2,1],[0,1,1]]
Explanation: The diagram above shows the initial matrix, the matrix after the first query, and the matrix after the second query.
- In the first query, we add 1 to every element in the submatrix with the top left corner (1, 1) and bottom right corner (2, 2).
- In the second query, we add 1 to every element in the submatrix with the top left corner (0, 0) and bottom right corner (1, 1).
```

Example 2:


```
Input: n = 2, queries = [[0,0,1,1]]
Output: [[1,1],[1,1]]
Explanation: The diagram above shows the initial matrix and the matrix after the first query.
- In the first query we add 1 to every element in the matrix.
```

Constraints:

- `1 <= n <= 500`
- `1 <= queries.length <= 10 4`
- `0 <= row1 i <= row2 i < n`
- `0 <= col1 i <= col2 i < n`