# 3531. Count Covered Buildings

Solved ●
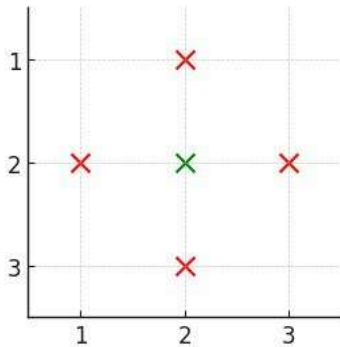
**Medium**    🏷 Topics    🏢 Companies    💡 Hint

You are given a positive integer `n`, representing an `n x n` city. You are also given a 2D grid `buildings`, where `buildings[i] = [x, y]` denotes a **unique** building located at coordinates `[x, y]`.

A building is **covered** if there is at least one building in all **four** directions: left, right, above, and below.

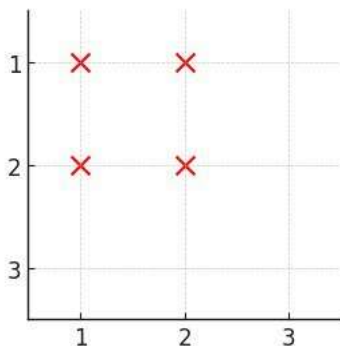Return the number of **covered** buildings.

**Example 1:**



**Input:** n = 3, buildings = [[1,2],[2,2],[3,2],[2,1],[2,3]]

**Output:** 1

**Explanation:**

- Only building `[2,2]` is covered as it has at least one building:
  - above (`[1,2]`)

  - below (`[3,2]`)

  - left (`[2,1]`)

  - right (`[2,3]`)

- Thus, the count of covered buildings is 1.
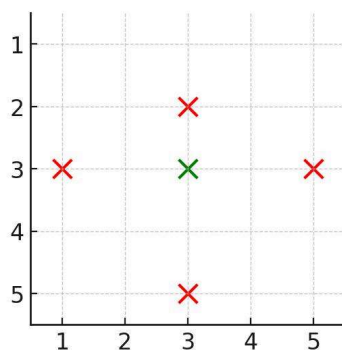
**Example 2:**



**Input:** n = 3, buildings = [[1,1],[1,2],[2,1],[2,2]]

**Output:** 0

**Explanation:**

- No building has at least one building in all four directions.

**Example 3:**



**Input:** n = 5, buildings = [[1,3],[3,2],[3,3],[3,5],[5,3]]

**Output:** 1

**Explanation:**

- Only building [3,3] is covered as it has at least one building:
  - above ([1,3])
  - below ([5,3])
  - left ([3,2])
  - right ([3,5])
- Thus, the count of covered buildings is 1.


**Constraints:**

- $2 <= n <= 10^5$
- $1 <= buildings.length <= 10^5$
- buildings[i] = [x, y]
- $1 <= x, y <= n$
- All coordinates of buildings are **unique**.


Seen this question in a real interview before?    1/5

Yes      No

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| Discussion (20) | ⌄ |
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