

Problem 598: Range Addition II

Problem Information

Difficulty: Easy

Acceptance Rate: 57.96%

Paid Only: No

Tags: Array, Math

Problem Description

You are given an $m \times n$ matrix M initialized with all 0's and an array of operations ops , where $ops[i] = [a_i, b_i]$ means $M[x][y]$ should be incremented by one for all $0 \leq x < a_i$ and $0 \leq y < b_i$.

Count and return the number of maximum integers in the matrix after performing all the operations.

Example 1:



Input: $m = 3, n = 3, ops = [[2,2],[3,3]]$ **Output:** 4 **Explanation:** The maximum integer in M is 2, and there are four of it in M . So return 4.

Example 2:

Input: $m = 3, n = 3, ops = [[2,2],[3,3],[3,3],[3,3],[2,2],[3,3],[3,3],[3,3],[2,2],[3,3],[3,3],[3,3]]$
Output: 4

Example 3:

Input: $m = 3, n = 3, ops = []$ **Output:** 9

Constraints:

```
*`1 <= m, n <= 4 * 104` * `0 <= ops.length <= 104` * `ops[i].length == 2` * `1 <= ai <= m` * `1 <= bi <= n`
```

Code Snippets

C++:

```
class Solution {  
public:  
    int maxCount(int m, int n, vector<vector<int>>& ops) {  
  
    }  
};
```

Java:

```
class Solution {  
    public int maxCount(int m, int n, int[][] ops) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def maxCount(self, m: int, n: int, ops: List[List[int]]) -> int:
```