

764. Largest Plus Sign

Medium 842 164 Add to List Share

You are given an integer n . You have an $n \times n$ binary grid `grid` with all values initially `1`'s except for some indices given in the array `mines`. The i^{th} element of the array `mines` is defined as `mines[i] = [xi, yi]` where `grid[xi][yi] == 0`.

Return the order of the largest **axis-aligned plus sign** of `1`'s contained in `grid`. If there is none, return `0`.

An **axis-aligned plus sign** of `1`'s of order k has some center `grid[r][c] == 1` along with four arms of length $k - 1$ going up, down, left, and right, and made of `1`'s. Note that there could be `0`'s or `1`'s beyond the arms of the plus sign, only the relevant area of the plus sign is checked for `1`'s.

Example 1:

1	1	1	1	1
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1
1	1	0	1	1

Input: $n = 5$, `mines = [[4,2]]`
Output: `2`
Explanation: In the above grid, the largest plus sign can only be of order 2. One of them is shown.

Example 2:

0

Input: $n = 1$, `mines = [[0,0]]`
Output: `0`
Explanation: There is no plus sign, so return `0`.

Constraints:

- $1 \leq n \leq 500$
- $1 \leq \text{mines.length} \leq 5000$
- $0 \leq x_i, y_i < n$
- All the pairs (x_i, y_i) are **unique**.

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```
1 class Solution {
2     public int orderOfLargestPlusSign(int n, int[][] mines) {
3
4     }
5 }
```