

@LeetCode

In a 2D `grid` from (0, 0) to (N-1, N-1), every cell contains a `1`, except those cells in the given list `mines` which are `0`. What is the largest axis-aligned plus sign of `1`s contained in the grid? Return the order of the plus sign. If there is none, return 0.

An "axis-aligned plus sign of `1`s of order `k`" has some center `grid[x][y] = 1` along with 4 arms of length `k-1` going up, down, left, and right, and made of `1`s. This is demonstrated in the diagrams below. 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.

**Examples of Axis-Aligned Plus Signs of Order k:**

Order 1:

```
000
```

```
010
```

```
000
```

Order 2:

```
00000
```

```
00100
```

```
01110
```

```
00100
```

```
00000
```

Order 3:

```
0000000
```

```
0001000
```

```
0001000
```

```
0111110
```

```
0001000
```

```
0001000
```

```
0000000
```

#### Example 1:

**Input:** `N = 5, mines = [[4, 2]]`

**Output:** 2

**Explanation:**

```
11111
```

```
11111
```

```
11111
```

```
11111
```

```
11011
```

In the above grid, the largest plus sign can only be order 2. One of them is marked in bold.

#### Example 2:

**Input:** `N = 2, mines = []`

**Output:** 1

**Explanation:**

There is no plus sign of order 2, but there is of order 1.

#### Example 3:

**Input:** `N = 1, mines = [[0, 0]]`

**Output:** 0

**Explanation:**

There is no plus sign, so return 0.

#### Note:

1. `N` will be an integer in the range `[1, 500]`.
2. `mines` will have length at most 5000.

3. `mines[i]` will be length 2 and consist of integers in the range `[0, N-1]`.
4. *(Additionally, programs submitted in C, C++, or C# will be judged with a slightly smaller time limit.)*