

5663. Find Kth Largest XOR Coordinate Value

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You are given a 2D `matrix` of size `m x n`, consisting of non-negative integers. You are also given an integer `k`.

The **value** of coordinate `(a, b)` of the matrix is the XOR of all `matrix[i][j]` where `0 <= i <= a < m` and `0 <= j <= b < n` (**0-indexed**).

Find the  $k^{th}$  largest value (**1-indexed**) of all the coordinates of `matrix`.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

Example 1:

**Input:** `matrix = [[5,2],[1,6]]`, `k = 1`  
**Output:** 7  
**Explanation:** The value of coordinate `(0,1)` is `5 XOR 2 = 7`, which is the largest value.

Example 2:

**Input:** `matrix = [[5,2],[1,6]]`, `k = 2`  
**Output:** 5  
**Explanation:** The value of coordinate `(0,0)` is `5 = 5`, which is the 2nd largest value.

Example 3:

**Input:** `matrix = [[5,2],[1,6]]`, `k = 3`  
**Output:** 4  
**Explanation:** The value of coordinate `(1,0)` is `5 XOR 1 = 4`, which is the 3rd largest value.

Example 4:

**Input:** `matrix = [[5,2],[1,6]]`, `k = 4`  
**Output:** 0  
**Explanation:** The value of coordinate `(1,1)` is `5 XOR 2 XOR 1 XOR 6 = 0`, which is the 4th largest value.

Constraints:

- `m == matrix.length`
- `n == matrix[i].length`
- `1 <= m, n <= 1000`
- `0 <= matrix[i][j] <= 106`
- `1 <= k <= m * n`

JavaScript

```
1 /**
2  * @param {number[][]} matrix
3  * @param {number} k
4  * @return {number}
5  */
6 var kthLargestValue = function(matrix, k) {
7
8 };
```