1738. Find Kth Largest XOR Coordinate Value

Description

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`.

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.
```

Constraints:

- `m == matrix.length`
- `n == matrix[i].length`
- `1 <= m, n <= 1000`
- `0 <= matrix[i][j] <= 10 6`
- `1 <= k <= m * n`