1310. XOR Queries of a Subarray

Description

You are given an array `arr` of positive integers. You are also given the array `queries` where `queries[i] = [left_i, right_i]`.

For each query `i` compute the **XOR** of elements from `left_i` to `right_i` (that is, `arr[left_i] XOR arr[left_i + 1] XOR ... XOR arr[right_i]`).

Return an array `answer` where `answer[i]` is the answer to the `i^th` query.

Example 1:

```
Input: arr = [1,3,4,8], queries = [[0,1],[1,2],[0,3],[3,3]]
Output: [2,7,14,8]
Explanation:
The binary representation of the elements in the array are:
1 = 0001
3 = 0011
4 = 0100
8 = 1000
The XOR values for queries are:
[0,1] = 1 xor 3 = 2
[1,2] = 3 xor 4 = 7
[0,3] = 1 xor 3 xor 4 xor 8 = 14
[3,3] = 8
```

Example 2:

```
Input: arr = [4,8,2,10], queries = [[2,3],[1,3],[0,0],[0,3]]
Output: [8,0,4,4]
```

Constraints:

- `1 <= arr.length, queries.length <= 3 * 10^4`
- `1 <= arr[i] <= 10^9`
- `queries[i].length == 2`
- `0 <= left_i <= right_i < arr.length`