5719. Maximum XOR for Each Query

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

You are given a **sorted** array `nums` of `n` non-negative integers and an integer `maximumBit`. You want to perform the following query `n` **times**:

1. Find a non-negative integer `k < 2^maximumBit` such that `nums[0] XOR nums[1] XOR ... XOR nums[nums.length-1] XOR k` is **maximized**. `k` is the answer to the `i^th` query.
2. Remove the **last** element from the current array `nums`.

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

Example 1:

```
Input: nums = [0,1,1,3], maximumBit = 2
Output: [0,3,2,3]
Explanation: The queries are answered as follows:
1st query: nums = [0,1,1,3], k = 0 since 0 XOR 1 XOR 1 XOR 3 XOR 0 = 3.
2nd query: nums = [0,1,1], k = 3 since 0 XOR 1 XOR 1 XOR 3 = 3.
3rd query: nums = [0,1], k = 2 since 0 XOR 1 XOR 2 = 3.
4th query: nums = [0], k = 3 since 0 XOR 3 = 3.
```

Example 2:

```
Input: nums = [2,3,4,7], maximumBit = 3
Output: [5,2,6,5]
Explanation: The queries are answered as follows:
1st query: nums = [2,3,4,7], k = 5 since 2 XOR 3 XOR 4 XOR 7 XOR 5 = 7.
2nd query: nums = [2,3,4], k = 2 since 2 XOR 3 XOR 4 XOR 2 = 7.
3rd query: nums = [2,3], k = 6 since 2 XOR 3 XOR 6 = 7.
4th query: nums = [2], k = 5 since 2 XOR 5 = 7.
```

Example 3:

```
Input: nums = [0,1,2,2,5,7], maximumBit = 3
Output: [4,3,6,4,6,7]
```

Constraints:

- `nums.length == n`
- `1 <= n <= 10^5`
- `1 <= maximumBit <= 20`
- `0 <= nums[i] < 2^maximumBit`
- `nums` is sorted in **ascending** order.

Java

```
class Solution {
    public int[] getMaximumXor(int[] nums, int maximumBit) {

    }
}
```