

1707. Maximum XOR With an Element From Array

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You are given an array `nums` consisting of non-negative integers. You are also given a `queries` array, where `queries[i] = [xi, mi]`.

The answer to the *i*th query is the maximum bitwise XOR value of `xi` and any element of `nums` that does not exceed `mi`. In other words, the answer is `max(nums[j] XOR xi)` for all `j` such that `nums[j] <= mi`. If all elements in `nums` are larger than `mi`, then the answer is `-1`.

Return an integer array `answer` where `answer.length == queries.length` and `answer[i]` is the answer to the *i*th query.

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|--------------------|------|
| User Accepted: | 234 |
| User Tried: | 785 |
| Total Accepted: | 254 |
| Total Submissions: | 1516 |
| Difficulty: | Hard |

Example 1:

Input: `nums = [0,1,2,3,4]`, `queries = [[3,1],[1,3],[5,6]]`
Output: `[3,3,7]`
Explanation:
1) 0 and 1 are the only two integers not greater than 1. 0 XOR 3 = 3 and 1 XOR 3 = 2. The larger of the two is 3.
2) 1 XOR 2 = 3.
3) 5 XOR 2 = 7.

Example 2:

Input: `nums = [5,2,4,6,6,3]`, `queries = [[12,4],[8,1],[6,3]]`
Output: `[15,-1,5]`

Constraints:

- 1 <= `nums.length`, `queries.length` <= 10⁵
- `queries[i].length` == 2
- 0 <= `nums[j]`, `xi`, `mi` <= 10⁹

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Java

```
1 class Solution {
2     public int[] maximizeXor(int[] nums, int[][] queries) {
3
4     }
5 }
```