

Maximum XOR With an Element From Array

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 x_i and any element of `nums` that does not exceed m_i . In other words, the answer is $\max(\text{nums}[j] \text{ XOR } x_i)$ for all j such that $\text{nums}[j] \leq m_i$. If all elements in `nums` are larger than m_i , 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.*

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. $0 \text{ XOR } 3 = 3$ and $1 \text{ XOR } 3 = 2$. The larger of the two is 3.

2) $1 \text{ XOR } 2 = 3$.

3) $5 \text{ XOR } 2 = 7$.

Example 2:

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

Output: `[15,-1,5]`

Constraints:

- $1 \leq \text{nums.length}, \text{queries.length} \leq 10^5$
- `queries[i].length == 2`
- $0 \leq \text{nums}[j], x_i, m_i \leq 10^9$

