Problem 421: Maximum XOR of Two Numbers in an Array

Problem Information

Difficulty: Medium
Acceptance Rate: 53.39%
Paid Only: No
Tags: Array, Hash Table, Bit Manipulation, Trie

Problem Description

Given an integer array `nums`, return _the maximum result of_`nums[i] XOR nums[j]`, where `0 <= i <= j < n`.

Example 1:

Input: nums = [3,10,5,25,2,8] **Output:** 28 **Explanation:** The maximum result is 5 XOR 25 = 28.

Example 2:

Input: nums = [14,70,53,83,49,91,36,80,92,51,66,70] **Output:** 127

Constraints:

* `1 <= nums.length <= 2 * 105` * `0 <= nums[i] <= 231 - 1`

Code Snippets

C++:

```
class Solution {
public:
int findMaximumXOR(vector<int>& nums) {
```

```
}
};
```

Java:

```
class Solution {
public int findMaximumXOR(int[] nums) {

}
}
```

Python3:

```
class Solution:
def findMaximumXOR(self, nums: List[int]) -> int:
```