Problem 260: Single Number III

Problem Information

Difficulty: Medium
Acceptance Rate: 70.45%
Paid Only: No
Tags: Array, Bit Manipulation

Problem Description

Given an integer array `nums`, in which exactly two elements appear only once and all the other elements appear exactly twice. Find the two elements that appear only once. You can return the answer in **any order**.

You must write an algorithm that runs in linear runtime complexity and uses only constant extra space.

Example 1:

Input: nums = [1,2,1,3,2,5] **Output:** [3,5] **Explanation:** [5, 3] is also a valid answer.

Example 2:

Input: nums = [-1,0] **Output:** [-1,0]

Example 3:

Input: nums = [0,1] **Output:** [1,0]

Constraints:

* `2 <= nums.length <= 3 * 104` * `-231 <= nums[i] <= 231 - 1` * Each integer in `nums` will appear twice, only two integers will appear once.

Code Snippets

C++:

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

}
};
```

Java:

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

}
}
```

Python3:

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