810. Chalkboard XOR Game

Description

You are given an array of integers `nums` represents the numbers written on a chalkboard.

Alice and Bob take turns erasing exactly one number from the chalkboard, with Alice starting first. If erasing a number causes the bitwise XOR of all the elements of the chalkboard to become `0`, then that player loses. The bitwise XOR of one element is that element itself, and the bitwise XOR of no elements is `0`.

Also, if any player starts their turn with the bitwise XOR of all the elements of the chalkboard equal to `0`, then that player wins.

Return `true` *if and only if Alice wins the game, assuming both players play optimally*.

Example 1:

```
Input: nums = [1,1,2]
Output: false
Explanation:
Alice has two choices: erase 1 or erase 2.
If she erases 1, the nums array becomes [1, 2]. The bitwise XOR of all the elements of the chalkboard is 1 XOR 2 = 3. Now Bob can remove any element
he wants, because Alice will be the one to erase the last element and she will lose.
If Alice erases 2 first, now nums become [1, 1]. The bitwise XOR of all the elements of the chalkboard is 1 XOR 1 = 0. Alice will lose.
```

Example 2:

```
Input: nums = [0,1]
Output: true
```

Example 3:

```
Input: nums = [1,2,3]
Output: true
```

Constraints:

- `1 <= nums.length <= 1000`
- `0 <= nums[i] < 2`^{16}