Description Solution Discuss (200) Submissions

## 2425. Bitwise XOR of All Pairings

Medium 99 2 Add to List Share

You are given two **0-indexed** arrays, `nums1` and `nums2`, consisting of non-negative integers. There exists another array, `nums3`, which contains the bitwise XOR of **all pairings** of integers between `nums1` and `nums2` (every integer in `nums1` is paired with every integer in `nums2` **exactly once**).

Return *the **bitwise XOR** of all integers in* `nums3`.

**Example 1:**

```
Input: nums1 = [2,1,3], nums2 = [10,2,5,0]
Output: 13
Explanation:
A possible nums3 array is [8,0,7,2,11,3,4,1,9,1,6,3].
The bitwise XOR of all these numbers is 13, so we return 13.
```

**Example 2:**

```
Input: nums1 = [1,2], nums2 = [3,4]
Output: 0
Explanation:
All possible pairs of bitwise XORs are nums1[0] ^ nums2[0], nums1[0]
^ nums2[1], nums1[1] ^ nums2[0],
and nums1[1] ^ nums2[1].
Thus, one possible nums3 array is [2,5,1,6].
2 ^ 5 ^ 1 ^ 6 = 0, so we return 0.
```

**Constraints:**

- `1 <= nums1.length, nums2.length <= 10^5`
- `0 <= nums1[i], nums2[j] <= 10^9`

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Seen this question in a real interview before? Yes No

Show Hint 1

Show Hint 2

Java Autocomplete

```java
class Solution {
    public int xorAllNums(int[] nums1, int[] nums2) {

    }
}
```

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