

5756. Minimum XOR Sum of Two Arrays

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You are given two integer arrays `nums1` and `nums2` of length `n`.

The **XOR sum** of the two integer arrays is $(\text{nums1}[0] \text{ XOR } \text{nums2}[0]) + (\text{nums1}[1] \text{ XOR } \text{nums2}[1]) + \dots + (\text{nums1}[n - 1] \text{ XOR } \text{nums2}[n - 1])$ (**0-indexed**).

- For example, the **XOR sum** of `[1,2,3]` and `[3,2,1]` is equal to $(1 \text{ XOR } 3) + (2 \text{ XOR } 2) + (3 \text{ XOR } 1) = 2 + 0 + 2 = 4$.

Rearrange the elements of `nums2` such that the resulting **XOR sum** is **minimized**.

Return the **XOR sum** after the rearrangement.

User Accepted:	538
User Tried:	2183
Total Accepted:	559
Total Submissions:	3853
Difficulty:	Hard

Example 1:

Input: `nums1 = [1,2], nums2 = [2,3]`
Output: 2
Explanation: Rearrange `nums2` so that it becomes `[3,2]`.
The XOR sum is $(1 \text{ XOR } 3) + (2 \text{ XOR } 2) = 2 + 0 = 2$.

Example 2:

Input: `nums1 = [1,0,3], nums2 = [5,3,4]`
Output: 8
Explanation: Rearrange `nums2` so that it becomes `[5,4,3]`.
The XOR sum is $(1 \text{ XOR } 5) + (0 \text{ XOR } 4) + (3 \text{ XOR } 3) = 4 + 4 + 0 = 8$.

Constraints:

- `n == nums1.length`
- `n == nums2.length`
- `1 <= n <= 14`
- `0 <= nums1[i], nums2[i] <= 107`

Java

```
1 class Solution {
2     public int minimumXORSum(int[] nums1, int[] nums2) {
3
4     }
5 }
```