1989. Minimum XOR Sum of Two Arrays

Difficulty : Hard

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

The **XOR sum** of the two integer arrays is `(nums1[0] XOR nums2[0]) + (nums1[1] XOR nums2[1]) + ... + (nums1[n - 1] XOR nums2[n - 1])` (**0-indexed**).

- For example, the **XOR sum** of `[1,2,3]` and `[3,2,1]` is equal to `(1 XOR 3) + (2 XOR 2) + (3 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.*

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 XOR 3) + (2 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 XOR 5) + (0 XOR 4) + (3 XOR 3) = 4 + 4 + 0 = 8.

Constraints:

- `n == nums1.length`
- `n == nums2.length`
- `1 <= n <= 14`
- `0 <= nums1[i], nums2[i] <= 10^7`