

350. Intersection of Two Arrays II

Description

Given two integer arrays `nums1` and `nums2`, return *an array of their intersection*. Each element in the result must appear as many times as it shows in both arrays and you may return the result in **any order**.

Example 1:

Input: `nums1 = [1,2,2,1]`, `nums2 = [2,2]`
Output: `[2,2]`

Example 2:

Input: `nums1 = [4,9,5]`, `nums2 = [9,4,9,8,4]`
Output: `[4,9]`
Explanation: `[9,4]` is also accepted.

Constraints:

- `1 <= nums1.length, nums2.length <= 1000`
- `0 <= nums1[i], nums2[i] <= 1000`

Follow up:

- What if the given array is already sorted? How would you optimize your algorithm?
- What if `nums1`'s size is small compared to `nums2`'s size? Which algorithm is better?
- What if elements of `nums2` are stored on disk, and the memory is limited such that you cannot load all elements into the memory at once?

