

496. Next Greater Element I

Description

The **next greater element** of some element `x` in an array is the **first greater** element that is **to the right** of `x` in the same array.

You are given two **distinct 0-indexed** integer arrays `nums1` and `nums2`, where `nums1` is a subset of `nums2`.

For each `0 <= i < nums1.length`, find the index `j` such that `nums1[i] == nums2[j]` and determine the **next greater element** of `nums2[j]` in `nums2`. If there is no next greater element, then the answer for this query is `-1`.

Return *an array* `ans` *of length* `nums1.length` *such that* `ans[i]` *is the next greater element as described above.*

Example 1:

Input: `nums1 = [4,1,2]`, `nums2 = [1,3,4,2]`

Output: `[-1,3,-1]`

Explanation: The next greater element for each value of `nums1` is as follows:

- 4 is underlined in `nums2 = [1,3,4,2]`. There is no next greater element, so the answer is `-1`.
- 1 is underlined in `nums2 = [1,3,4,2]`. The next greater element is 3.
- 2 is underlined in `nums2 = [1,3,4,2]`. There is no next greater element, so the answer is `-1`.

Example 2:

Input: `nums1 = [2,4]`, `nums2 = [1,2,3,4]`

Output: `[3,-1]`

Explanation: The next greater element for each value of `nums1` is as follows:

- 2 is underlined in `nums2 = [1, 2,3,4]`. The next greater element is 3.
- 4 is underlined in `nums2 = [1,2,3, 4]`. There is no next greater element, so the answer is `-1`.

Constraints:

- `1 <= nums1.length <= nums2.length <= 1000`
- `0 <= nums1[i], nums2[i] <= 104`
- All integers in `nums1` and `nums2` are **unique**.
- All the integers of `nums1` also appear in `nums2`.

Follow up: Could you find an `O(nums1.length + nums2.length)` solution?

