

496. Next Greater Element I

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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 $0 \leq i < \text{nums1.length}$, find the index j such that `nums1[i] == nums2[j]` and determine the **next greater element** of `nums2`.

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:

- $1 \leq \text{nums1.length} \leq \text{nums2.length} \leq 1000$
- $0 \leq \text{nums1}[i], \text{nums2}[i] \leq 10^4$
- All integers in `nums1` and `nums2` are **unique**.
- All the integers of `nums1` also appear in `nums2`.

Follow up: Could you find an $O(\text{nums1.length} + \text{nums2.length})$ solution?

Seen this question in a real interview before? 1/4

Yes No

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