

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[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:

- $1 \leq \text{nums1.length} \leq \text{nums2.length} \leq 1000$
- $0 \leq \text{nums1}[i], \text{nums2}[i] \leq 10^4$
- 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?

Solution:

```
class Solution {
    public int[] nextGreaterElement(int[] nums1, int[] nums2) {
        Map<Integer, Integer> map = new HashMap();
        for(int i = 0; i < nums2.length; i++) {
            for(int j = i; j < nums2.length; j++) {
                if(nums2[j] > nums2[i]) {
                    map.put(nums2[i], nums2[j]);
                    break;
                } else if(j == nums2.length - 1) {
                    map.put(nums2[i], -1);
                }
            }
        }
        for(int i = 0; i < nums1.length; i++) {
            nums1[i] = map.get(nums1[i]);
        }
        return nums1;
    }
}
```