496. Next Greater Element I

You are given two integer arrays `nums1` and `nums2` both of **unique** elements, where `nums1` is a subset of `nums2`.

Find all the next greater numbers for `nums1`'s elements in the corresponding places of `nums2`.

The Next Greater Number of a number `x` in `nums1` is the first greater number to its right in `nums2`. If it does not exist, return `-1` for this number.

Example 1:

Input: nums1 = [4,1,2], nums2 = [1,3,4,2]
Output: [-1,3,-1]
Explanation: For number 4 in the first array, you cannot find the next greater number for it in the second array,
so output -1.
For number 1 in the first array, the next greater number for it in the second array is 3.
For number 2 in the first array, there is no next greater number for it in the second array,
so output -1.

Example 2:

Input: nums1 = [2,4], nums2 = [1,2,3,4]
Output: [3,-1]
Explanation:
For number 2 in the first array, the next greater number for it in the second array is 3.
For number 4 in the first array, there is no next greater number for it in the second array,
so output -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?

```
def nextGreaterElement(self, nums1: List[int], nums2: List[int]) ->
List[int]:
```

```
        stack = []
        map = {}

        for i in range(len(nums2)-1,-1,-1):
            while len(stack)>0 and stack[-1]<=nums2[i]:
                stack.pop()
            map[nums2[i]] = stack[-1] if len(stack) else -1
            stack.append(nums2[i])

        ans = []
        for ele in nums1:
            ans.append(map[ele])
        return ans
```