

496. Next Greater Element I

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 $\text{nums1}[i] == \text{nums2}[j]$ and determine the **next greater element** of $\text{nums2}[j]$ 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* $\text{ans}[i]$ *is the* **next greater element** *as described above.*

Example 1:

Input: $\text{nums1} = [4,1,2]$, $\text{nums2} = [1,3,4,2]$

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

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

- 4 is underlined in $\text{nums2} = [1,3,\underline{4},2]$. There is no next greater element, so the answer is -1 .

- 1 is underlined in $\text{nums2} = [\underline{1},3,4,2]$. The next greater element is 3.

- 2 is underlined in $\text{nums2} = [1,3,4,\underline{2}]$. There is no next greater element, so the answer is -1 .

Example 2:

Input: $\text{nums1} = [2,4]$, $\text{nums2} = [1,2,3,4]$

Output: $[3,-1]$

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

- 2 is underlined in $\text{nums2} = [1,\underline{2},3,4]$. The next greater element is 3.

- 4 is underlined in $\text{nums2} = [1,2,3,\underline{4}]$. 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.