

2454. Next Greater Element IV

Description

You are given a **0-indexed** array of non-negative integers `nums`. For each integer in `nums`, you must find its respective **second greater** integer.

The **second greater** integer of `nums[i]` is `nums[j]` such that:

- `j > i`
- `nums[j] > nums[i]`
- There exists **exactly one** index `k` such that `nums[k] > nums[i]` and `i < k < j`.

If there is no such `nums[j]`, the second greater integer is considered to be `-1`.

- For example, in the array `[1, 2, 4, 3]`, the second greater integer of `1` is `4`, `2` is `3`, and that of `3` and `4` is `-1`.

Return *an integer array* `answer`, where `answer[i]` *is the second greater integer of* `nums[i]`.

Example 1:

```
Input: nums = [2,4,0,9,6]
Output: [9,6,6,-1,-1]
Explanation:
0th index: 4 is the first integer greater than 2, and 9 is the second integer greater than 2, to the right of 2.
1st index: 9 is the first, and 6 is the second integer greater than 4, to the right of 4.
2nd index: 9 is the first, and 6 is the second integer greater than 0, to the right of 0.
3rd index: There is no integer greater than 9 to its right, so the second greater integer is considered to be -1.
4th index: There is no integer greater than 6 to its right, so the second greater integer is considered to be -1.
Thus, we return [9,6,6,-1,-1].
```

Example 2:

```
Input: nums = [3,3]
Output: [-1,-1]
Explanation:
We return [-1,-1] since neither integer has any integer greater than it.
```

Constraints:

- `1 <= nums.length <= 105`
- `0 <= nums[i] <= 109`

