

# 2832. Maximal Range That Each Element Is Maximum in It

## Description

You are given a **0-indexed** array `nums` of **distinct** integers.

Let us define a **0-indexed** array `ans` of the same length as `nums` in the following way:

- `ans[i]` is the **maximum** length of a subarray `nums[l..r]`, such that the maximum element in that subarray is equal to `nums[i]`.

Return *the array* `ans`.

**Note** that a **subarray** is a contiguous part of the array.

### Example 1:

**Input:** `nums = [1,5,4,3,6]`

**Output:** `[1,4,2,1,5]`

**Explanation:** For `nums[0]` the longest subarray in which 1 is the maximum is `nums[0..0]` so `ans[0] = 1`.

For `nums[1]` the longest subarray in which 5 is the maximum is `nums[0..3]` so `ans[1] = 4`.

For `nums[2]` the longest subarray in which 4 is the maximum is `nums[2..3]` so `ans[2] = 2`.

For `nums[3]` the longest subarray in which 3 is the maximum is `nums[3..3]` so `ans[3] = 1`.

For `nums[4]` the longest subarray in which 6 is the maximum is `nums[0..4]` so `ans[4] = 5`.

### Example 2:

**Input:** `nums = [1,2,3,4,5]`

**Output:** `[1,2,3,4,5]`

**Explanation:** For `nums[i]` the longest subarray in which it's the maximum is `nums[0..i]` so `ans[i] = i + 1`.

### Constraints:

- $1 \leq \text{nums.length} \leq 10^5$
- $1 \leq \text{nums}[i] \leq 10^5$
- All elements in `nums` are distinct.

