2334. Subarray With Elements Greater Than Varying Threshold

Description

You are given an integer array `nums` and an integer `threshold`.

Find any subarray of `nums` of length `k` such that **every** element in the subarray is **greater** than `threshold / k`.

Return *the **size** of **any** such subarray*. If there is no such subarray, return `-1`.

A **subarray** is a contiguous non-empty sequence of elements within an array.

Example 1:

```
Input: nums = [1,3,4,3,1], threshold = 6
Output: 3
Explanation: The subarray [3,4,3] has a size of 3, and every element is greater than 6 / 3 = 2.
Note that this is the only valid subarray.
```

Example 2:

```
Input: nums = [6,5,6,5,8], threshold = 7
Output: 1
Explanation: The subarray [8] has a size of 1, and 8 > 7 / 1 = 7. So 1 is returned.
Note that the subarray [6,5] has a size of 2, and every element is greater than 7 / 2 = 3.5.
Similarly, the subarrays [6,5,6], [6,5,6,5], [6,5,6,5,8] also satisfy the given conditions.
Therefore, 2, 3, 4, or 5 may also be returned.
```

Constraints:

- `1 <= nums.length <= 10^5`
- `1 <= nums[i], threshold <= 10^9`