LeetCode Medium Array Test

Question 1: Longest Consecutive Sequence (Twist Version)
Given an unsorted array of integers **nums**, return the **length of the longest consecutive sequence** of numbers. You must write an algorithm that runs in **O(n)** time.

Example:
Input: nums = [100, 4, 200, 1, 3, 2]
Output: 4
Explanation: The longest consecutive elements sequence is [1, 2, 3, 4].

Twist:
Modify your solution to also return the actual sequence (as a sorted list) along with its length.

Expected Output Example:
Input: nums = [100, 4, 200, 1, 3, 2]
Output: length = 4, sequence = [1, 2, 3, 4]

Constraints:
1 <= nums.length <= 10^5
-10^9 <= nums[i] <= 10^9

Question 2: Subarray Sum Equals K (Tricky Version)
Given an integer array **nums** and an integer **k**, return the total number of continuous subarrays whose sum equals to k.

Example:
Input: nums = [1, 2, 3], k = 3
Output: 2
Explanation: The subarrays are [1, 2] and [3].

Twist:
Also return the list of all such subarrays that sum to k.

Expected Output Example:
Input: nums = [1, 2, 3, -1, 2], k = 3
Output: count = 3, subarrays = [[1, 2], [3], [1, 2, 3, -1, -2]]

Constraints:
1 <= nums.length <= 2 * 10^4
-1000 <= nums[i] <= 1000
-10^7 <= k <= 10^7