

2524. Maximum Frequency Score of a Subarray Premium

Hard Topics Companies Hint

You are given an integer array `nums` and a **positive** integer `k`.

The **frequency score** of an array is the sum of the **distinct** values in the array raised to the power of their **frequencies**, taking the sum **modulo** `109 + 7`.

- For example, the frequency score of the array `[5,4,5,7,4,4]` is `(43 + 52 + 71) modulo (109 + 7) = 96`.

Return the ***maximum** frequency score of a **subarray** of size `k` in `nums`*. You should maximize the value under the modulo and not the actual value.

A **subarray** is a contiguous part of an array.

Example 1:

Input: `nums = [1,1,1,2,1,2]`, `k = 3`
Output: `5`
Explanation: The subarray `[2,1,2]` has a frequency score equal to 5. It can be shown that it is the maximum frequency score we can have.

Example 2:

Input: `nums = [1,1,1,1,1,1]`, `k = 4`
Output: `1`
Explanation: All the subarrays of length 4 have a frequency score equal to 1.

Constraints:

- `1 <= k <= nums.length <= 105`
- `1 <= nums[i] <= 106`

Seen this question in a real interview before? 1/5

Yes No

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Hint 1

Calculate the frequency score of each subarray of size k and return the maximum one.

Hint 2

Use the sliding window technique to keep the frequency scores.

Discussion (2)