2524. Maximum Frequency Score of a Subarray

Description

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** `10^9 + 7`.

- For example, the frequency score of the array `[5,4,5,7,4,4]` is `(4^3 + 5^2 + 7^1) modulo (10^9 + 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 <= 10^5`
- `1 <= nums[i] <= 10^6`