Given a non-empty array of non-negative integers nums, the **degree** of this array is defined as the maximum frequency of any one of its elements.

Your task is to find the smallest possible length of a (contiguous) subarray of nums, that has the same degree as nums.

**Example 1:**

Input: nums = [1,2,2,3,1]  
Output: 2  
Explanation:   
The input array has a degree of 2 because both elements 1 and 2 appear twice.  
Of the subarrays that have the same degree:  
[1, 2, 2, 3, 1], [1, 2, 2, 3], [2, 2, 3, 1], [1, 2, 2], [2, 2, 3], [2, 2]  
The shortest length is 2. So return 2.

**Example 2:**

Input: nums = [1,2,2,3,1,4,2]  
Output: 6  
Explanation:   
The degree is 3 because the element 2 is repeated 3 times.  
So [2,2,3,1,4,2] is the shortest subarray, therefore returning 6.

**Constraints:**

* nums.length will be between 1 and 50,000.
* nums[i] will be an integer between 0 and 49,999.