2419. Longest Subarray With Maximum Bitwise AND

Description

You are given an integer array nums of size n.

Consider a non-empty subarray from nums that has the maximum possible bitwise AND.

• In other words, let k be the maximum value of the bitwise AND of any subarray of nums. Then, only subarrays with a bitwise AND equal to k should be considered.

Return the length of the longest such subarray.

The bitwise AND of an array is the bitwise AND of all the numbers in it.

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

Example 1:

```
Input: nums = [1,2,3,3,2,2]
Output: 2
Explanation:
The maximum possible bitwise AND of a subarray is 3.
The longest subarray with that value is [3,3], so we return 2.
```

Example 2:

```
Input: nums = [1,2,3,4]
Output: 1
Explanation:
The maximum possible bitwise AND of a subarray is 4.
The longest subarray with that value is [4], so we return 1.
```

Constraints:

- 1 <= nums.length <= 10 ⁵
- $1 \leftarrow nums[i] \leftarrow 10^6$