

3097. Shortest Subarray With OR at Least K II

Description

You are given an array `nums` of **non-negative** integers and an integer `k` .

An array is called **special** if the bitwise `OR` of all of its elements is **at least** `k` .

Return *the length of the **shortest special non-empty** subarray of `nums` , or return `-1` if no special subarray exists* .

Example 1:

Input: `nums = [1,2,3]`, `k = 2`

Output: `1`

Explanation:

The subarray `[3]` has `OR` value of `3` . Hence, we return `1` .

Example 2:

Input: `nums = [2,1,8]`, `k = 10`

Output: `3`

Explanation:

The subarray `[2,1,8]` has `OR` value of `11` . Hence, we return `3` .

Example 3:

Input: `nums = [1,2]`, `k = 0`

Output: `1`

Explanation:

The subarray `[1]` has `OR` value of `1` . Hence, we return `1` .

Constraints:

- `1 <= nums.length <= 2 * 105`
- `0 <= nums[i] <= 109`
- `0 <= k <= 109`

