## **Shortest Subarray With OR at Least KII**

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 \* 10<sup>5</sup>
- 0 <= nums[i] <= 10<sup>9</sup>
- $0 \le k \le 10^9$