

Subarrays with K Different Integers

Given an integer array `nums` and an integer `k`, return *the number of **good subarrays*** of `nums`.

A **good array** is an array where the number of different integers in that array is exactly `k`.

- For example, `[1,2,3,1,2]` has 3 different integers: 1, 2, and 3.

A **subarray** is a **contiguous** part of an array.

Example 1:

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

Output: 7

Explanation: Subarrays formed with exactly 2 different integers: `[1,2]`, `[2,1]`, `[1,2]`, `[2,3]`, `[1,2,1]`, `[2,1,2]`, `[1,2,1,2]`

Example 2:

Input: `nums = [1,2,1,3,4]`, `k = 3`

Output: 3

Explanation: Subarrays formed with exactly 3 different integers: `[1,2,1,3]`, `[2,1,3]`, `[1,3,4]`.

Constraints:

- $1 \leq \text{nums.length} \leq 2 * 10^4$
- $1 \leq \text{nums}[i], k \leq \text{nums.length}$