[LeetCode](https://leetcode.com/problems/subarrays-with-k-different-integers/description/?envType=daily-question&envId=2024-03-30)

<https://github.com/AdityaKonda6/-50DaysOfCoding>

<https://leetcode.com/problems/subarrays-with-k-different-integers/description/?envType=daily-question&envId=2024-03-30>

<https://www.linkedin.com/in/aditya-adi-konda/>

Day 40 of [#50dayscodingchallenge](https://www.linkedin.com/feed/hashtag/?keywords=50dayscodingchallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633):  
[#leetcode](https://www.linkedin.com/feed/hashtag/?keywords=leetcode&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcodechallenge](https://www.linkedin.com/feed/hashtag/?keywords=leetcodechallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcodestreak](https://www.linkedin.com/feed/hashtag/?keywords=leetcodestreak&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcode2024](https://www.linkedin.com/feed/hashtag/?keywords=leetcode2024&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcode50day](https://www.linkedin.com/feed/hashtag/?keywords=leetcode50day&highlightedUpdateUrns=urn:li:activity:7166316239483461633)  
   
Ventured further into my coding journey today, tackling the engaging LeetCode Problem "Successfully solved LeetCode Problem ���"

“992. Subarrays with K Different Integers.”

   
✨ Task: 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.

Examples:

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].

Let's Connect:

If you find this problem intriguing or have insights to share, let's connect! I'm passionate about problem-solving, algorithmic thinking, and collaborative learning. Feel free to comment or reach out for engaging discussions and knowledge exchange.Unravel the mystery using your coding skills!

[#CodingChallenge](https://www.linkedin.com/feed/hashtag/?keywords=codingchallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#Algorithm](https://www.linkedin.com/feed/hashtag/?keywords=algorithm&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#LinkedInPost](https://www.linkedin.com/feed/hashtag/?keywords=linkedinpost&highlightedUpdateUrns=urn:li:activity:7166316239483461633) #Algorithm #Optimization #DataStructures #CodingChallenge  
  
Excited about the progress and challenges ahead!  
   
Make Sure You Follow My GitHub For Solutions: <https://github.com/AdityaKonda6/-50DaysOfCoding>  
  
  
Happy coding!

**Solution:-**

class Solution {

  public int subarraysWithKDistinct(int[] nums, int k) {

    return subarraysWithAtMostKDistinct(nums, k) - subarraysWithAtMostKDistinct(nums, k - 1);

  }

  private int subarraysWithAtMostKDistinct(int[] nums, int k) {

    int ans = 0;

    int[] count = new int[nums.length + 1];

    for (int l = 0, r = 0; r < nums.length; ++r) {

      if (++count[nums[r]] == 1)

        --k;

      while (k == -1)

        if (--count[nums[l++]] == 0)

          ++k;

      ans += r - l + 1;

    }

    return ans;

  }

}

