Problem 2537: Count the Number of Good Subarrays

Problem Information

Difficulty: Medium
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

Given an integer array

nums

and an integer

k

, return

the number of

good

subarrays of

nums

.

A subarray

arr

is

good

if there are

at least

k

pairs of indices

(i, j)

such that

i < j

and

arr[i] == arr[j]

.

A

subarray

is a contiguous

non-empty

sequence of elements within an array.

Example 1:

Input:

nums = [1,1,1,1,1], k = 10

Output:

1

Explanation:

The only good subarray is the array nums itself.

Example 2:

Input:

nums = [3,1,4,3,2,2,4], k = 2

Output:

4

Explanation:

There are 4 different good subarrays: - [3,1,4,3,2,2] that has 2 pairs. - [3,1,4,3,2,2,4] that has 3 pairs. - [1,4,3,2,2,4] that has 2 pairs. - [4,3,2,2,4] that has 2 pairs.

Constraints:

1 <= nums.length <= 10

5

1 <= nums[i], k <= 10

9

Code Snippets

C++:

```
class Solution {
public:
long long countGood(vector<int>& nums, int k) {

}
};
```

Java:

```
class Solution {
public long countGood(int[] nums, int k) {

}
}
```

Python3:

```
class Solution:
def countGood(self, nums: List[int], k: int) -> int:
```

Python:

```
class Solution(object):
def countGood(self, nums, k):
"""
:type nums: List[int]
:type k: int
:rtype: int
"""
```

JavaScript:

```
/**
* @param {number[]} nums
* @param {number} k
* @return {number}
*/
var countGood = function(nums, k) {

};
```

TypeScript:

```
function countGood(nums: number[], k: number): number {

};
```

C#:

```
public class Solution {
public long CountGood(int[] nums, int k) {

}
}
```

C:

```
long long countGood(int* nums, int numsSize, int k) {

}
```

Go:

```
func countGood(nums []int, k int) int64 {

}
```

Kotlin:

```
class Solution {
fun countGood(nums: IntArray, k: Int): Long {

}
}
```

Swift:

```
class Solution {
func countGood(_ nums: [Int], _ k: Int) -> Int {

}
}
```

Rust:

```
impl Solution {
pub fn count_good(nums: Vec<i32>, k: i32) -> i64 {

}
}
```

Ruby:

```
# @param {Integer[]} nums
# @param {Integer} k
# @return {Integer}
def count_good(nums, k)

end
```

PHP:

```
class Solution {

/**
* @param Integer[] $nums
* @param Integer $k
* @return Integer
*/
function countGood($nums, $k) {

}
}
```

Dart:

```
class Solution {
int countGood(List<int> nums, int k) {

}
}
```

Scala:

```
object Solution {
def countGood(nums: Array[Int], k: Int): Long = {

}
```

```
}
```

Elixir:

```
defmodule Solution do
@spec count_good(nums :: [integer], k :: integer) :: integer
def count_good(nums, k) do

end
end
```

Erlang:

```
-spec count_good(Nums :: [integer()], K :: integer()) -> integer().
count_good(Nums, K) ->
.
```

Racket:

```
(define/contract (count-good nums k)
(-> (listof exact-integer?) exact-integer? exact-integer?)
)
```

Solutions

C++ Solution:

```
/*
* Problem: Count the Number of Good Subarrays
* Difficulty: Medium
* Tags: array, hash
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) for hash map
*/

class Solution {
public:
long long countGood(vector<int>& nums, int k) {
```

```
}
};
```

Java Solution:

```
/**
* Problem: Count the Number of Good Subarrays
* Difficulty: Medium
* Tags: array, hash
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) for hash map
*/

class Solution {
public long countGood(int[] nums, int k) {

}
}
```

Python3 Solution:

```
"""
Problem: Count the Number of Good Subarrays
Difficulty: Medium
Tags: array, hash

Approach: Use two pointers or sliding window technique
Time Complexity: O(n) or O(n log n)
Space Complexity: O(n) for hash map
"""

class Solution:
def countGood(self, nums: List[int], k: int) -> int:
# TODO: Implement optimized solution
pass
```

Python Solution:

```
class Solution(object):
def countGood(self, nums, k):
"""
:type nums: List[int]
:type k: int
:rtype: int
"""
```

JavaScript Solution:

```
/**
* Problem: Count the Number of Good Subarrays
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* @return {number}
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```

TypeScript Solution:

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* Tags: array, hash
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*/

function countGood(nums: number[], k: number): number {
```

```
};
```

C# Solution:

```
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* Tags: array, hash
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* Time Complexity: O(n) or O(n log n)
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*/

public class Solution {
public long CountGood(int[] nums, int k) {

}
}
```

C Solution:

```
/*
* Problem: Count the Number of Good Subarrays
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* Tags: array, hash
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* Time Complexity: O(n) or O(n log n)
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*/

long long countGood(int* nums, int numsSize, int k) {

}
```

Go Solution:

```
// Problem: Count the Number of Good Subarrays
// Difficulty: Medium
```

```
// Tags: array, hash
//
// Approach: Use two pointers or sliding window technique
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func countGood(nums []int, k int) int64 {

}
```

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class Solution {
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impl Solution {
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```

Ruby Solution:

```
# @param {Integer[]} nums
# @param {Integer} k
# @return {Integer}
def count_good(nums, k)

end
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PHP Solution:

```
class Solution {

/**
* @param Integer[] $nums
* @param Integer $k
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