Problem 1248: Count Number of Nice Subarrays

Problem Information

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

Problem Description

Given an array of integers

nums

and an integer

k

. A continuous subarray is called

nice

if there are

k

odd numbers on it.

Return

the number of

nice

sub-arrays

.

Example 1:

Input:

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

Output:

2

Explanation:

The only sub-arrays with 3 odd numbers are [1,1,2,1] and [1,2,1,1].

Example 2:

Input:

nums = [2,4,6], k = 1

Output:

0

Explanation:

There are no odd numbers in the array.

Example 3:

Input:

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

Output:

16

Constraints:

1 <= nums.length <= 50000

1 <= nums[i] <= 10^5

1 <= k <= nums.length

Code Snippets

C++:

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

}
};
```

Java:

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

}
}
```

Python3:

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

Python:

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

```
"""
```

JavaScript:

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

};
```

TypeScript:

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

};
```

C#:

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

}
}
```

C:

```
int numberOfSubarrays(int* nums, int numsSize, int k) {

}
```

Go:

```
func numberOfSubarrays(nums []int, k int) int {

}
```

Kotlin:

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

}
}
```

Swift:

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

}
}
```

Rust:

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

}
}
```

Ruby:

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

end
```

PHP:

```
class Solution {

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

}
}
```

Dart:

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

}
}
```

Scala:

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

}
}
```

Elixir:

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

end
end
```

Erlang:

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

Racket:

```
(define/contract (number-of-subarrays nums k)
(-> (listof exact-integer?) exact-integer? exact-integer?)
)
```

Solutions

C++ Solution:

```
/*
* Problem: Count Number of Nice Subarrays
* Difficulty: Medium
* Tags: array, math, 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:
int numberOfSubarrays(vector<int>& nums, int k) {

}
};
```

Java Solution:

```
/**
* Problem: Count Number of Nice Subarrays
* Difficulty: Medium
* Tags: array, math, 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 int numberOfSubarrays(int[] nums, int k) {

}
}
```

Python3 Solution:

```
"""
Problem: Count Number of Nice Subarrays
Difficulty: Medium
Tags: array, math, 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 numberOfSubarrays(self, nums: List[int], k: int) -> int:
# TODO: Implement optimized solution
pass
```

Python Solution:

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

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function numberOfSubarrays(nums: number[], k: number): number {

};
```

C# Solution:

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

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}
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C Solution:

```
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int numberOfSubarrays(int* nums, int numsSize, int k) {

}
```

Go Solution:

```
// Problem: Count Number of Nice Subarrays
// Difficulty: Medium
// Tags: array, math, hash
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// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
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func numberOfSubarrays(nums []int, k int) int {

}
```

Kotlin Solution:

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class Solution {
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impl Solution {
pub fn number_of_subarrays(nums: Vec<i32>, k: i32) -> i32 {

}
}
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Ruby Solution:

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

end
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PHP Solution:

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class Solution {

/**
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