128. You are given a 0-indexed integer array nums. The distinct count of a subarray of nums is defined as: Let nums[i..j] be a subarray of nums consisting of all the indices from i to j such that 0 <= i <= j < nums.length. Then the number of distinct values in nums[i..j] is called the distinct count of nums[i..j]. Return the sum of the squares of distinct counts of all subarrays of nums. A subarray is a contiguous non-empty sequence of elements within an array.

Example 1:

Input: nums = [1,2,1]

Output: 15

AIM: To find the sum of squares of distinct counts of all substrings of nums

PROGRAM:

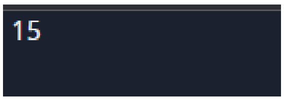
```
def sum_of_squares_of_distinct_counts(nums):
    n = len(nums)
    result = 0

    for i in range(n):
        window_set = set()
        freq = {}

        for j in range(i, n):
            if nums[j] in window_set:
                freq[nums[j]] += 1
            else:
                window_set.add(nums[j])
                freq[nums[j]] = 1

            distinct_count = len(window_set)
            result += distinct_count ** 2

    return result
nums = [1, 2, 1]
print(sum_of_squares_of_distinct_counts(nums))  # Output: 15
```

OUTPUT: 

```
15
```

TIME COMPLEXITY: O(n^2)