1. Given an array of integers arr and two integers k and threshold , return the number of sub-arrays of size k and average greater than or equal to threshold . [Leetcode 1343]

    Example 1:
    Input: arr = [2,2,2,2,5,5,5,8], k = 3, threshold = 4
    Output: 3
    Explanation: Sub-arrays [2,5,5],[5,5,5] and [5,5,8] have averages 4, 5 and 6 respectively. All
    other sub-arrays of size 3 have averages less than 4 (the threshold).
    Example 2:
    Input: arr = [11,13,17,23,29,31,7,5,2,3], k = 3, threshold = 5
    Output: 6
    Explanation: The first 6 sub-arrays of size 3 have averages greater than 5. Note that
    averages are not integers.

2. The score of an array is defined as the product of its sum and its length.
    For example, the score of [1, 2, 3, 4, 5] is (1 + 2 + 3 + 4 + 5) * 5 = 75 .
    Given a positive integer array nums and an integer k , return the number of non-empty subarrays of nums whose score is strictly less than k . [Leetcode 2302]
    A subarray is a contiguous sequence of elements within an array.

    Example 1:
    Input: nums = [2,1,4,3,5], k = 10
    Output: 6
    Explanation:
    The 6 subarrays having scores less than 10 are:
    [2] with score 2 * 1 = 2.
    [1] with score 1 * 1 = 1.
    [4] with score 4 * 1 = 4.
    [3] with score 3 * 1 = 3.
    [5] with score 5 * 1 = 5.
    [2,1] with score (2 + 1) * 2 = 6.
    Note that subarrays such as [1,4] and [4,3,5] are not considered because their scores are 10
    and 36 respectively, while we need scores strictly less than 10.
    Example 2:
    Input: nums = [1,1,1], k = 5
    Output: 5
    Explanation:
    Every subarray except [1,1,1] has a score less than 5.
    [1,1,1] has a score (1 + 1 + 1) * 3 = 9, which is greater than 5.
    Thus, there are 5 subarrays having scores less than 5.

3. 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. [Leetcode 1248]

    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 is no odd numbers in the array.

Example 3:

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

Output: 16