

2348. Number of Zero-Filled Subarrays

Description

Given an integer array `nums`, return *the number of subarrays filled with 0*.

A **subarray** is a contiguous non-empty sequence of elements within an array.

Example 1:

Input: `nums = [1,3,0,0,2,0,0,4]`

Output: 6

Explanation:

There are 4 occurrences of `[0]` as a subarray.

There are 2 occurrences of `[0,0]` as a subarray.

There is no occurrence of a subarray with a size more than 2 filled with 0. Therefore, we return 6.

Example 2:

Input: `nums = [0,0,0,2,0,0]`

Output: 9

Explanation:

There are 5 occurrences of `[0]` as a subarray.

There are 3 occurrences of `[0,0]` as a subarray.

There is 1 occurrence of `[0,0,0]` as a subarray.

There is no occurrence of a subarray with a size more than 3 filled with 0. Therefore, we return 9.

Example 3:

Input: `nums = [2,10,2019]`

Output: 0

Explanation: There is no subarray filled with 0. Therefore, we return 0.

Constraints:

- $1 \leq \text{nums.length} \leq 10^5$
- $-10^9 \leq \text{nums}[i] \leq 10^9$

