

974. Subarray Sums Divisible by K

Description

Given an integer array `nums` and an integer `k`, return *the number of non-empty **subarrays** that have a sum divisible by `k`*.

A **subarray** is a **contiguous** part of an array.

Example 1:

Input: `nums = [4,5,0,-2,-3,1]`, `k = 5`

Output: 7

Explanation: There are 7 subarrays with a sum divisible by `k = 5`:

`[4, 5, 0, -2, -3, 1]`, `[5]`, `[5, 0]`, `[5, 0, -2, -3]`, `[0]`, `[0, -2, -3]`, `[-2, -3]`

Example 2:

Input: `nums = [5]`, `k = 9`

Output: 0

Constraints:

- `1 <= nums.length <= 3 * 104`
- `-104 <= nums[i] <= 104`
- `2 <= k <= 104`

