

Skills: Problem Solving (Intermediate) ⓘ

🕒 Recommended Time: 20 mins 🏆 Points: 75 ✅ 12 test cases (3 samples)

Coding 📁

MEDIUM

Math

Dynamic Programming

Algorithms

Problem Solving

A k -subarray of an array is:

- a subarray (contiguous elements)
- the sum of the elements is evenly divisible by k (*sum modulo $k = 0$*).

Given an array of integers, determine the number of k -subarrays it contains.

Example

$k = 5$

$nums = [5, 10, 11, 9, 5]$

The 10 k -subarrays are $\{5\}$, $\{5, 10\}$, $\{5, 10, 11, 9\}$, $\{5, 10, 11, 9, 5\}$, $\{10\}$, $\{10, 11, 9\}$, $\{10, 11, 9, 5\}$, $\{11, 9\}$, $\{11, 9, 5\}$, $\{5\}$.

Function Description

Complete the function `kSub` in the editor below. The function must return a long integer that represents the number of k -subarrays in the array.

`kSub` has the following parameter(s):

`int k`: the divisor of a k -subarray