# 2270. Number of Ways to Split Array

You are given a 0-indexed integer array nums of length n.

nums contains a valid split at index i if the following are true:

The sum of the first i + 1 elements is greater than or equal to the sum of the last n - i - 1 elements.

There is at least one element to the right of i. That is,  $0 \le i \le n - 1$ .

Return the number of valid splits in nums.

## Example 1:

Input: nums = [10,4,-8,7]

Output: 2

## **Explanation:**

There are three ways of splitting nums into two non-empty parts:

- Split nums at index 0. Then, the first part is [10], and its sum is 10. The second part is [4,-8,7], and its sum is 3. Since  $10 \ge 3$ , i = 0 is a valid split.
- Split nums at index 1. Then, the first part is [10,4], and its sum is 14. The second part is [-8,7], and its sum is -1. Since  $14 \ge -1$ , i = 1 is a valid split.
- Split nums at index 2. Then, the first part is [10,4,-8], and its sum is 6. The second part is [7], and its sum is 7. Since 6 < 7, i = 2 is not a valid split.

Thus, the number of valid splits in nums is 2.

# Example 2:

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

Output: 2

#### **Explanation:**

There are two valid splits in nums:

- Split nums at index 1. Then, the first part is [2,3], and its sum is 5. The second part is [1,0], and its sum is 1. Since 5 >= 1, i = 1 is a valid split.
- Split nums at index 2. Then, the first part is [2,3,1], and its sum is 6. The second part is [0], and its sum is 0. Since 6 >= 0, i = 2 is a valid split.

### **Constraints:**

2 <= nums.length <= 105

-105 <= nums[i] <= 105