

6067. Number of Ways to Split Array

My Submissions (/contest/biweekly-contest-78/problems/number-of-ways-to-split-array/submissions/)

Back to Contest (/contest/biweekly-contest-78/)

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 <= i < n - 1`.

Return the number of **valid splits** in `nums`.

| | |
|--------------------|--------|
| User Accepted: | 3 |
| User Tried: | 3 |
| Total Accepted: | 3 |
| Total Submissions: | 3 |
| Difficulty: | Medium |

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 > 3, this 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 > -1, this 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, this 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, this 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, this is a valid split.

Constraints:

- `2 <= nums.length <= 105`
- `-105 <= nums[i] <= 105`

JavaScript

```
1 const sm = (a) => a.reduce((x, y) => x + y), 0);
2
3 const waysToSplitArray = (a) => {
4   let n = a.length, sum = sm(a), lsum = 0, res = 0;
5   for (let i = 0; i < n - 1; i++) {
6     lsum += a[i];
7     let rsum = sum - lsum;
8     if (lsum >= rsum) res++;
9   }
10  return res;
11 };
```

☐ Custom Testcase

Use Example Testcases

Run

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Submission Result: **Accepted** (/submissions/detail/699316846/) ?

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