

5846. Find the Middle Index in Array

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Given a **0-indexed** integer array `nums`, find the **leftmost** `middleIndex` (i.e., the smallest amongst all the possible ones).

A `middleIndex` is an index where $\text{nums}[0] + \text{nums}[1] + \dots + \text{nums}[\text{middleIndex}-1] == \text{nums}[\text{middleIndex}+1] + \text{nums}[\text{middleIndex}+2] + \dots + \text{nums}[\text{nums.length}-1]$.

If `middleIndex == 0`, the left side sum is considered to be `0`. Similarly, if `middleIndex == nums.length - 1`, the right side sum is considered to be `0`.

Return the **leftmost** `middleIndex` that satisfies the condition, or `-1` if there is no such index.

User Accepted:	4251
User Tried:	4597
Total Accepted:	4334
Total Submissions:	6626
Difficulty:	Easy

Example 1:

Input: `nums = [2,3,-1,8,4]`

Output: `3`

Explanation:

The sum of the numbers before index 3 is: $2 + 3 + -1 = 4$

The sum of the numbers after index 3 is: $4 = 4$

Example 2:

Input: `nums = [1,-1,4]`

Output: `2`

Explanation:

The sum of the numbers before index 2 is: $1 + -1 = 0$

The sum of the numbers after index 2 is: `0`

Example 3:

Input: `nums = [2,5]`

Output: `-1`

Explanation:

There is no valid `middleIndex`.

Example 4:

Input: `nums = [1]`

Output: `0`

Explanation:

The sum of the numbers before index `0` is: `0`

The sum of the numbers after index `0` is: `0`

Constraints:

- $1 \leq \text{nums.length} \leq 100$
- $-1000 \leq \text{nums}[i] \leq 1000$

JavaScript



```
1 const sm = (a) => a.reduce(((x, y) => x + y), 0);
```


```
2
3 ▾ const findMiddleIndex = (a) => {
4 ▾   for (let i = 0; i < a.length; i++) {
5     let left = a.slice(0, i);
6     let right = a.slice(i + 1);
7     let ls = sm(left), rs = sm(right)
8     // pr(left, right);
9     if (ls == rs) return i;
10  }
11  return -1;
12 };
```

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