

(4) WhatsApp

LeetCode - The World's Leading

Trie and Ternary search tree

leetcode.com/problems/running-sum-of-1d-array/submissions/

Problem List

Premium

0

Description

Editorial

Solutions (9.3K)

Submissions

Accepted

Editorial

+ Solution

Runtime

Details

- ms

Beats 100.00% of users with Java

Memory

Details

41.80 mb

Beats 70.09% of users with Java

Next question

1. Two Sum

More challenges

59. Spiral Matrix II

1024. Video Stitching

528. Random Pick with Weight

Status	Language	Runtime	Memory	Time	Notes
Accepted	Java	0 ms	41.8 MB	13 hours ago	
Accepted	Java	0 ms	41.9 MB	13 hours ago	

i Java

Auto

```
1 class Solution {
2     public int[] runningSum(int[] nums) {
3         int sum = 0;
4         for(int i = 0; i<nums.length; i++){
5             sum += nums[i];
6             nums[i] = sum;
7         }
8
9         return nums;
10    }
11 }
```

Console

Run

Submit

Sum of All Odd Length Subarrays xLeetCode - The World's Leading xTrie and Ternary search tree x+

leetcode.com/problems/sum-of-all-odd-length-subarrays/description/

Problem List<>↺

Premium🕒🔥0👤

DescriptionEditorialSolutions (2K)Submissions

1588. Sum of All Odd Length Subarrays

Easy✔️👍 3.4K🗨️ 256⭐️🔄

🔒 Companies

Given an array of positive integers `arr`, return *the sum of all possible **odd-length subarrays** of `arr`.*

A **subarray** is a contiguous subsequence of the array.

Example 1:

Input: `arr = [1,4,2,5,3]`

Output: 58

Explanation: The odd-length subarrays of `arr` and their sums are:

[1] = 1

[4] = 4

[2] = 2

[5] = 5

[3] = 3

[1,4,2] = 7

[4,2,5] = 11

[2,5,3] = 10

[1,4,2,5,3] = 15

If we add all these together we get 1 + 4 + 2 + 5 + 3 + 7 + 11 + 10 + 15 = 58

Example 2:

Input: `arr = [1,2]`

Output: 3

i Java | • Auto

```
1 class Solution {
2     public int sumOddLengthSubarrays(int[] arr) {
3         int sum=0;
4         int n = arr.length;
5         for(int i=0; i<arr.length; i++){
6             int left = i+1;
7             int right = n-i;
8             int k = left * right;
9             int odd = (k+1)/2;
10            sum = sum + odd*arr[i];
11        }
12        return sum;
13    }
14 }
15 }
```

TestcaseResult

AcceptedRuntime: 0 ms

• Case 1• Case 2• Case 3

Input

arr =

[1,4,2,5,3]

Output

58

Console

RunSubmit

Find the Highest Altitude - LeetC

Trie and Ternary search tree

leetcode.com/problems/find-the-highest-altitude/description/

Problem List

Premium

0

Description

Editorial

Solutions (3.8K)

Submissions

1732. Find the Highest Altitude

Easy 2.4K 216

Companies

There is a biker going on a road trip. The road trip consists of $n + 1$ points at different altitudes. The biker starts his trip on point 0 with altitude equal 0.

You are given an integer array `gain` of length `n` where `gain[i]` is the **net gain in altitude** between points `i` and `i + 1` for all $(0 \leq i < n)$. Return the **highest altitude** of a point.

Example 1:

Input: `gain = [-5,1,5,0,-7]`

Output: 1

Explanation: The altitudes are `[0,-5,-4,1,1,-6]`. The highest is 1.

Example 2:

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

Output: 0

Explanation: The altitudes are `[0,-4,-7,-9,-10,-6,-3,-1]`. The highest is 0.

Constraints:

- `n == gain.length`

i Java • Auto

```
1 class Solution {
2     public int largestAltitude(int[] gain) {
3         int max=0;
4         int sum=0;
5         for(int i=0;i<gain.length;i++){
6             sum+=gain[i];
7             max=Math.max(max,sum);
8         }
9         return max;
10    }
11 }
```

Testcase

Result

Accepted Runtime: 0 ms

Case 1

Case 2

Input

gain =

[-5,1,5,0,-7]

Output

1

Console

Run

Submit

Find the Middle Index in Array - L x

Trie and Ternary search tree x +

leetcode.com/problems/find-the-middle-index-in-array/description/

Problem List

Premium

0

Description

Editorial

Solutions (1.1K)

Submissions

1991. Find the Middle Index in Array

Hint

Easy

1.2K

49

Companies

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 `nums[0] + nums[1] + ... + nums[middleIndex-1] == nums[middleIndex+1] + nums[middleIndex+2] + ... + nums[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.

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`

i Java

Auto

```
1 class Solution {
2     public int findMiddleIndex(int[] nums) {
3
4         int sum = 0;
5         for(int i: nums) sum += i;
6         int left = 0;
7         for(int i=0;i<nums.length;i++){
8             int curr = sum - nums[i];
9             if(curr==left) return i;
10            left += nums[i];
11            sum -= nums[i];
12        }
13        return -1;
14    }
15 }
```

Testcase

Result

Accepted

Runtime: 0 ms

Case 1

Case 2

Case 3

Input

nums =
[2,3,-1,8,4]

Output

3

Console

Run

Submit

Find the Middle Index in Array - 1 x

Find the Pivot Integer - LeetCode x

+

leetcode.com/problems/find-the-pivot-integer/description/

Problem List

Premium

0

Description

Editorial

Solutions (938)

Submissions

2485. Find the Pivot Integer

Easy 509 8

Companies

Given a positive integer n , find the **pivot integer** x such that:

- The sum of all elements between 1 and x inclusively equals the sum of all elements between x and n inclusively.

Return the *pivot integer* x . If no such integer exists, return -1 . It is guaranteed that there will be at most one pivot index for the given input.

Example 1:

Input: $n = 8$

Output: 6

Explanation: 6 is the pivot integer since: $1 + 2 + 3 + 4 + 5 + 6 = 6 + 7 + 8 = 21$.

Example 2:

Input: $n = 1$

Output: 1

Explanation: 1 is the pivot integer since: $1 = 1$.

Example 3:

i Java • Auto

```
1 class Solution {
2     public int pivotInteger(int n) {
3         int fsum=1,bsum=(n*(n+1))/2;
4
5         if(n==1) return 1;
6         for(int i=2;i<=n;i++)
7         {
8             fsum=fsum+i;
9             bsum=bsum-(i-1);
10            if(fsum==bsum)
11                return i;
12        }
13        return -1;
14    }
15 }
```

Testcase

Result

Accepted Runtime: 0 ms

Case 1

Case 2

Case 3

Input

n =

8

Output

6

Console

Run

Submit

Description	Editorial	Solutions (1.3K)	Submissions
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2574. Left and Right Sum Differences

Easy 678 50

 Companies

Given a **0-indexed** integer array `nums`, find a **0-indexed** integer array `answer` where:

- `answer.length == nums.length.`
- `answer[i] = |leftSum[i] - rightSum[i]|.`

Where:

- `leftSum[i]` is the sum of elements to the left of the index `i` in the array `nums`. If there is no such element, `leftSum[i] = 0`.
- `rightSum[i]` is the sum of elements to the right of the index `i` in the array `nums`. If there is no such element, `rightSum[i] = 0`.

Return *the array* `answer`.

Example 1:

Input: nums = [10,4,8,3]

Output: [15, 1, 11, 22]

Explanation: The array leftSum is [0,10,14,22] and the array rightSum is [15,11,3,0].
The array answer is $[|0 - 15|, |10 - 11|, |14 - 3|, |22 - 0|] = [15, 1, 11, 22]$.

Example 2:

Java • Auto

```

18
19     }
20     temp=0;
21     for(int i=0;i<n;i++){
22         temp=(rightarr[i]-leftarr[i]);
23         if(temp<0){
24             newarr[i]=temp*-1;
25         }
26         else{
27             newarr[i]=temp;
28         }
29     }
30     return newarr;
31 }
32
33 }

```

Testcase	Result
----------	--------

Accepted Runtime: 0 ms

- Case 1
- Case 2

Input

```
nums =  
[10,4,8,3]
```

Output

[15, 1, 11, 22]

Console ▾

Run

Submit

Find the Middle Index in Array - 1 x Sum of Absolute Differences in a Sorted Array x Left and Right Sum Differences - x +

leetcode.com/problems/sum-of-absolute-differences-in-a-sorted-array/description/

Problem List

Premium

DescriptionEditorialSolutions (574)Submissions

1685. Sum of Absolute Differences in a Sorted Array

Medium1.1K32

Companies

You are given an integer array `nums` sorted in **non-decreasing** order.

Build and return an integer array `result` with the same length as `nums` such that `result[i]` is equal to the **summation of absolute differences** between `nums[i]` and all the other elements in the array.

In other words, `result[i]` is equal to `sum(|nums[i]-nums[j]|)` where `0 <= j < nums.length` and `j != i` (0-indexed).

Example 1:

Input: `nums = [2,3,5]`

Output: `[4,3,5]`

Explanation: Assuming the arrays are 0-indexed, then
`result[0] = |2-2| + |2-3| + |2-5| = 0 + 1 + 3 = 4,`
`result[1] = |3-2| + |3-3| + |3-5| = 1 + 0 + 2 = 3,`
`result[2] = |5-2| + |5-3| + |5-5| = 3 + 2 + 0 = 5.`

Example 2:

Input: `nums = [1,4,6,8,10]`

Output: `[24,15,13,15,21]`

i JavaAuto

```
1 class Solution {
2     public int[] getSumAbsoluteDifferences(int[] nums) {
3         int pre = 0;
4         int sum = Arrays.stream(nums).sum();
5         int res[] = new int[nums.length];
6         for (int i = 0; i < nums.length; i++) {
7             res[i] = (i * (nums[i] - pre) + ((sum - pre) - (nums.length - i) * nums[i]));
8             pre += nums[i];
9         }
10        return res;
11    }
12 }
```

TestcaseResult

AcceptedRuntime: 1 ms

Case 1Case 2

Input

nums =
[2,3,5]

Output

[4,3,5]

Console

RunSubmit

Find the Middle Index in Array - L xSum of Absolute Differences in a xReverse Words in a String - LeetC x+

leetcode.com/problems/reverse-words-in-a-string/description/

Problem List<>↺

Premium🕒🔥0👤

Description🔒 EditorialSolutions (7.9K)Submissions

151. Reverse Words in a String

Medium👍 6.8K🗨️ 4.8K★🔄

🔒 Companies

Given an input string `s`, reverse the order of the **words**.

A **word** is defined as a sequence of non-space characters. The **words** in `s` will be separated by at least one space.

Return a string of the words in reverse order concatenated by a single space.

Note that `s` may contain leading or trailing spaces or multiple spaces between two words. The returned string should only have a single space separating the words. Do not include any extra spaces.

Example 1:

Input: `s = "the sky is blue"`

Output: `"blue is sky the"`

Example 2:

Input: `s = " hello world "`

Output: `"world hello"`

Explanation: Your reversed string should not contain leading or trailing spaces.

Example 3:

i JavaAuto🔖{}↺⌘⚙️🔗

```
7
8    int len = arr.length;
9    for(int i=0; i<len/2; i++)
10   {
11       String tmp = arr[i];
12       arr[i] = arr[len-(i+1)];
13       arr[len-(i+1)] = tmp;
14   }
15
16   return String.join(" ", arr);
17
18 }
19 }
```

TestcaseResult🗒

AcceptedRuntime: 2 ms

• Case 1• Case 2• Case 3

Input

s =
"the sky is blue"

Output

"blue is sky the"

Console👇🔧RunSubmit