2219. Maximum Sum Score of Array Premium

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

The **sum score** of `nums` at an index `i` where `0 <= i < n` is the **maximum** of:

- The sum of the **first** `i + 1` elements of `nums`.
- The sum of the **last** `n - i` elements of `nums`.

Return *the **maximum sum score** of* `nums` *at any index.*

Example 1:

```
Input: nums = [4,3,-2,5]
Output: 10
Explanation:
The sum score at index 0 is max(4, 4 + 3 + -2 + 5) = max(4, 10) = 10.
The sum score at index 1 is max(4 + 3, 3 + -2 + 5) = max(7, 6) = 7.
The sum score at index 2 is max(4 + 3 + -2, -2 + 5) = max(5, 3) = 5.
The sum score at index 3 is max(4 + 3 + -2 + 5, 5) = max(10, 5) = 10.
The maximum sum score of nums is 10.
```

Example 2:

```
Input: nums = [-3,-5]
Output: -3
Explanation:
The sum score at index 0 is max(-3, -3 + -5) = max(-3, -8) = -3.
The sum score at index 1 is max(-3 + -5, -5) = max(-8, -5) = -5.
The maximum sum score of nums is -3.
```

Constraints:

- `n == nums.length`
- $1 <= n <= 10^5$
- $-10^5 <= nums[i] <= 10^5$

Seen this question in a real interview before?   1/5

Yes   No

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💡 Hint 1 ⌃

How can we use precalculation to efficiently calculate the average difference at an index?

💡 Hint 2 ⌃

Create a prefix and/or suffix sum array.

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