

# Problem 2219: Maximum Sum Score of Array

## Problem Information

Difficulty: **Medium**

Acceptance Rate: 62.71%

Paid Only: Yes

Tags: Array, Prefix Sum

## Problem Description

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

The **sum score** of `nums` at an index `i` where  $0 \leq i < n$  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` \*  $1 \leq n \leq 105$  \*  $-105 \leq \text{nums}[i] \leq 105$

## Code Snippets

### C++:

```
class Solution {  
public:  
    long long maximumSumScore(vector<int>& nums) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public long maximumSumScore(int[] nums) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def maximumSumScore(self, nums: List[int]) -> int:
```