

53. Maximum Subarray

Difficulty : Medium

<https://leetcode.com/problems/maximum-subarray>

Given an integer array `nums`, find the subarray which has the largest sum and return *its sum*.

Example 1:

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

Output: 6

Explanation: `[4,-1,2,1]` has the largest sum = 6.

Example 2:

Input: `nums = [1]`

Output: 1

Example 3:

Input: `nums = [5,4,-1,7,8]`

Output: 23

Constraints:

- $1 \leq \text{nums.length} \leq 10^5$
- $-10^4 \leq \text{nums}[i] \leq 10^4$

Follow up: If you have figured out the $O(n)$ solution, try coding another solution using the **divide and conquer** approach, which is more subtle.