53. Maximum Subarray

Given an integer array nums, find the contiguous subarray (containing at least one number) which has the largest sum and return *its* sum.

A **subarray** is a **contiguous** part of an array.

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 <= nums.length <= 10<sup>5</sup>
• -10<sup>4</sup> <= nums[i] <= 10<sup>4</sup>
```

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.