# 53. Maximum Subarray

# Difficulty : Medium

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

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

**Example 1:**

```
Input: nums = [-2,1,-3,4,-1,2,1,-5,4]
Output: 6
Explanation: The subarray [4,-1,2,1] has the largest sum 6.
```

**Example 2:**

```
Input: nums = [1]
Output: 1
Explanation: The subarray [1] has the largest sum 1.
```

**Example 3:**

```
Input: nums = [5,4,-1,7,8]
Output: 23
Explanation: The subarray [5,4,-1,7,8] has the largest sum 23.
```

**Constraints:**

- `1 <= nums.length <= 10^5`
- `-10^4 <= nums[i] <= 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.