**Maximum Subarray**

<https://leetcode.com/problems/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 <= 105
* -104 <= nums[i] <= 104

**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.