## **Maximum Subarray**

#### 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.

# 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
```