

# 53. Maximum Subarray

## Description

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:

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

**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.

