

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 <=  $10^5$
- $-10^4 <= nums[i] <= 10^4$

**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.

