Maximum Subarray

Try to solve the Maximum Subarray problem.

Statement

Given an integer array, `nums`, find the contiguous subarray (containing at least one number) which has the largest sum and return its sum.

> **Note:** A subarray is a contiguous part of an array.

Constraints:

- $1 \leq$ `nums.length` $\leq 10^5$
- $-10^4 \leq$ `nums[i]` $\leq 10^4$

Examples

Sample example 1

Input

2	1	0	4	1	−1	2	1	−10	4	−2	5

- -

Output

2	1	0	4	1	−1	2	1	−10	4	−2	5

The largest sum inside the array above is **10**.

Sample example 2

Input

4	8	−12	5	1	−4	20	1	−15	1	2	−2

- -

Output

4	8	−12	5	1	−4	20	1	−15	1	2	−2

The largest sum inside the array above is **23**.

Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:

Maximum Subarray

1 What is the correct output if the following array is passed as input?

nums = [-2, 1, 0, 4, -1, 7, 1, 5, -8]

A) 15

B) 17

C) 16

Submit Answer

< Question 1 of 2
0 attempted >

Reset Quiz ↻

Try it yourself

Implement your solution in the following coding playground:

Java

usercode > MaxSubArray.java

```
1  import java.util.*;
2  public class MaxSubArray{
3      public static int maxSubArray(int[] nums) {
```

```
7          return 0;
8      }
9  }
```

Submit

Test Cases   Results

Case 1   Case 2   Case 3

Input #1

[-2,1,-3,4,-1,2,1,-5,4]

Maximum Subarray

💡 Hide Hint

You might want to go over the Sliding Window pattern again.

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Contains Duplicate

Next →

Two Sum

✅ Mark as Completed