



STUDENT REPORT

DETAILS

Name

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Roll Number

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EXPERIMENT

Title

SUB ARRAY WITH MAX SUM

Description

You are given a list of integers, and your task is to find the subarray with the maximum sum. Write a function or method to solve this problem efficiently and return the maximum sum.

Input:

n: the no of elements in the array

nums (List of integers): A list of integers (1 <= len(nums) <= 10^5)

Sample input:

8

-1 2 3 10 -4 7 2 -5

Sample output:

20

Explanation:

The max subarry sum is 20. The subarray is [2,3,10,-4,7,2]

Source Code:

```
def max_subarray_sum(nums):
    curr_sum = 0
    max_sum = float('-inf')
    for num in nums:
        curr_sum += num
        max_sum = max(max_sum,curr_sum)
        if curr_sum < 0:
            curr_sum = 0
    return max_sum
n=int(input())
nums = list(map(int,input().split()))
print(max_subarray_sum(nums))
```

RESULT

5 / 5 Test Cases Passed | 100 %

