

# STUDENT REPORT

# DETAILS

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### Roll Number

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# **EXPERIMEN**

### Title

## 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  $\leq$  len(nums)  $\leq$  10^5)

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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):
    max_so_far = nums[0]
    curr_max = nums[0]
    for num in nums[1:]:
                                                                                                                    25.5
        curr_max = max(num, curr_max + num)
        max_so_far = max(max_so_far, curr_max)
    return max_so_far
n = int(input())
nums = list(map(int, input().split()))
max_sum = max_subarray_sum(nums)
print(max_sum)
```

**RESULT** 

0 / 5 Test Cases Passed | 0 %