



# STUDENT REPORT

## DETAILS

Name

PALAK YADAV

Roll Number

3BR23AI116

## 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:

```
n=8
nums=[-1, 2, 3, 10, -4, 7, 2, -5]
def max_subarrays_sum(nums):
    max_sums=float('-inf')
    current_sum=0
    for num in nums:
        current_sum+=num

        if current_sum>max_sum:
            max_sum=current_sum
        if current_sum<0:
            current_sum=0
    return max_sum

max_sum=max_subarrays_sum(nums)
print(max_sum)
```

RESULT

0 / 5 Test Cases Passed | 0 %