



STUDENT REPORT

DETAILS

Name

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EXPERIMENT

Title

MAXIMUM 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 ($1 \leq \text{len}(\text{nums}) \leq 10^5$).

Output:

An integer representing the maximum sum of a subarray in the input list.

Example:

Sample input:

5

1 2 3 -2 5

Sample Output:

9

Explanation:

The subarray with the maximum sum is [1, 2, 3, -2, 5], and the sum is 9

Source Code:

```
def max_(n,num):
    cur=num[0]
    max_so_far=num[0]
    for i in range(1,len(num)):
        cur=max(num[i],num[i]+cur)
        max_so_far=max(cur,max_so_far)
    return max_so_far
n=int(input())
num=list(map(int,input().split()))
print(max_(n,num))
```

RESULT

5 / 5 Test Cases Passed | 100 %