



STUDENT REPORT

DETAILS

Name

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Roll Number

3BR21EC109

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

Sample input:

8

-1 2 3 10 -4 7 2 -5

Sample output:

20

Explanation:

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

Source Code:

```
def max_of_subb(n,num):
    cur=num[0]
    max_so_far=num[0]

    for i in range(1,n):
        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_of_subb(n,num))
```

RESULT

3BR

109

21EC

3BR2
1EC1

1093
BR21

1EC1
293B

BR21F
EC