



# STUDENT REPORT

## DETAILS

### Name

Prasad Diptanshu

### Roll Number

3BR23ME015

## 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:

```
n=int(input())
l=list(map(int,input().split()))

s=l[0]
ms=l[0]
for i in range(1,n):
    s=max(l[i],s+l[i])
    ms=max(ms,s)
print(ms)
```

## RESULT

3BR

E015

23ML

3BR  
BR23

E015  
153

23ML  
3ME0

3BR2  
BR