

# Problem J. Maximum Subarray Sum

**Time limit** 2000 ms  
**Mem limit** 262144 kB  
**OS** Windows

Given an array of  $n$  integers, your task is to find the maximum sum of values in a contiguous, nonempty subarray.

## Input

The first input line has an integer  $n$ : the size of the array.

The second line has  $n$  integers  $x_1, x_2, \dots, x_n$ : the array values.

Constraints:

- $1 \leq n \leq 2 \cdot 10^5$
- $-10^9 \leq x_i \leq 10^9$

## Output

Print one integer: the maximum subarray sum.

### Sample 1

Input	Output
8 -1 3 -2 5 3 -5 2 2	9