

# Maximum Contiguous Sum of Subsequence

Time limit: 1 sec

Given a sequence  $A = a_1, a_2, a_3, \dots, a_n$ , a subsequence of **A** is a non-empty set of consecutive members of **A**. A subsequence can be defined by two distinct indices of **A** that mark the beginning and ending members of the subsequence. For example,  $\{a_3, a_4, a_5\}$  is a subsequence of **A** defined by indices 3 and 5.

We would like to find a subsequence of **A** such that the summation of the elements of that subsequence is maximal.

## Input

- The first line of input contains one integers **N** ( $1 \leq N \leq 10^5$ ) indicating the size of the array.
- The second line contains **N** integer **A[i]** ( $-1 \times 10^6 \leq A[i] \leq 10^6$ ) that indicates the elements of the array.

## Output

The only line of the output must contain the summation of the maximal subsequence

## Example

Input	Output
15 1 2 -1 5 3 -8 -2 4 3 -4 -5 7 -1 -2 4	10
8 -1 -2 -2 -2 -2 -2 -2 -1	-1