Max-Sum-Subarray

You are given an array A of N integers.

You need to find the contiguous subarray of the maximum sum in A. The subarray should not contain the number 0. Please find the maximum sum that is possible.

Note 1: The subarray can also be empty.

Note 2: The answer will fit in 32 bit-signed integer.

Input Format

The first line contains the integer N. The next line contains N integers representing the numbers in the array.

Constraints

$$1 \le N \le 10^5 \ -10^6 \le A_i \le 10^6$$

Output Format

Output a single line representing the maximum sum that can be obtained.

Sample Input

5 3 4 0 1 2

Sample Output

7

Explanation

The subarray with the maximum sum that doesn't contain a 0 is 3,4. Hence, the sum is 7.