Consecutive Sum

Input file: standard input
Output file: standard output

Time limit: 2 seconds Memory limit: 64 megabytes

Marth owns a large farm, where he grows pumpkins along a straight line. Each pumpkin has some weight. Marth wants to take two pumpkins to the Annual Pumpkin Festival such that the sum of their weights is as large as possible. Marth has programmed his robot Pittal to find these. Unfortunately, Marth forgot to allocate enough memory, so Pittal can only remember the weight of the pumpkin it last inspected. Additionally, Pittal inspects each pumpkin exactly once and in the order in which they grow on the line. Marth asks you to find out - what will be sum of weights Pittal returns?

Input

- First line of input contains an integer n. $(1 \le n \le 10^6)$
- Second line of input contains n space separated integers where A_i integer denotes weight of i^{th} pumpkin. $(1 \le A_i \le 10^{18})$

Output

A single integer denoting maximum possible sum.

Example

standard input	standard output
4	7
1 2 3 4	