

# Game

Input file:            **standard input**  
Output file:          **standard output**  
Time limit:          1 second  
Memory limit:        256 megabytes

There are  $n$  people playing a game. The people is number from 1 to  $n$ . A game round can be played with **1 to n-1** people.

Also you have an  $n$  element array  $a$ .

Say  $b_i$  denotes the number of rounds where person  $i$  is playing while person  $(i + 1) \bmod n$  is not.

Say  $c_i$  denotes the number of rounds where person  $(i + 1) \bmod n$  is playing while person  $i$  is not.

You have to keep  $b_i + c_i \leq a_i$  holds for every  $i$  or person  $i$  will be unhappy.

You are the host, you want to decide how the rounds will be played to maximize the total number of rounds. For simplicity, you only need to print this maximized number.

## Input

First line contains an integer  $n(2 \leq n \leq 2 \times 10^5)$ .

Second line contains  $n$  integers  $a_1, a_2, \dots, a_n(0 \leq a_i \leq 10^9)$ .

## Output

The only line contains an integer representing the maximum number of rounds that can be played.

## Example

standard input	standard output
2 7 5	5