Veznedar

Napolyon is a cash collector in the Banque de France and he likes to receive bribes. N customers lines up in the bank and Napolyon knows the wealthiest person in the line since he is very experienced in his job. Like all bribetakers, Napolyon prioritizes the wealthiest person in the line. If the next customer on the line is not the wealthiest customer, Napolyon sends this customer to the end of the line. Once the wealthiest person comes to front of the line, Napolyon takes 1 gayme per person who is in front of this wealthiest customer. Also he takes 1 gayme from every person as transaction fee. The person who paid the transaction fee leaves the line.

Input Format

First line contains N, the number of customers.
Next line contains N space separated integers denoting the wealth of customers. Line starts from the first item of this line.

Constraints

$1 \leq N \leq 10^5$
$1 \leq$ Wealth of the customers $\leq 10^5$

Output Format

Print a single integer denoting the total number of gaymes Napolyon has earned.

Sample Input

4 4 1 2 3

Sample Output

7

Explanation

First customer is the wealthiest customer so Napolyon earns 1 gayme as transaction fee. Second and third customers are sent to end of the line since these customers are not the wealthiest customers. Current state of the line is $3, 1, 2$. Now Napolyon will take 2 gaymes from the next customer who is currently the wealthiest customer. Also he will take 1 gayme as transaction fee. Napolyon has earned 4 gaymes so far. Next customer is not the wealthiest so he/she sent to end of the line. Last state of the line is $2, 1$. Since the next customer is the wealthiest Napolyon will take 1 gayme as bribe and 1 gayme as transaction fee. Last customer will only pay 1 gayme as transaction fee, now Napolyon has earned 7 gaymes in total.