

Growing Sequence

Timelimit: 1 sec

Problem description

There is a sequence a_1, \dots, a_n of natural numbers. You can transform the sequence by a simple operation: Increasing the value of one of the a_i 's by one. How many operations do you need at least to transform the sequence into one that is strictly increasing? Strictly increasing means that $a_1 < a_2 < \dots < a_n$.

Input

A number n ($n \leq 100$) followed by a line containing a_1, \dots, a_n ($1 \leq a_i \leq 10000$).

Output

The solution, i.e., a single number indicating the minimal number of operations to transform the sequence into a strictly increasing one.

Sample input/output

Input	Output
6 1 4 6 3 8 8	5