

1. You are given an array of n integers. You want to modify the array so that it is increasing, i.e., every element is at least as large as the previous element. On each turn, you may increase the value of any element by one. What is the minimum number of turns required?

Input

The first input line contains an integer n : the size of the array. Then, the second line contains n integers (the contents of the array).

Output

Print the minimum number of turns.

Sample Input	Sample Output
5 3 2 5 1 7	5 turns
4 1 2 2 6	0 turns

2. You are given all numbers between $1, 2, \dots, n$ except one. Your task is to find the missing number.

Input

1st input line contains an integer n . The 2nd line contains $n-1$ numbers. Each number is distinct and between 1 and n (inclusive).

Output

Print the missing number.

Sample Input	Sample Output
5 2 4 3 1	5
10 2 10 7 9 3 6 4 8 1	5

3. Write a C Program to check if a Substring is present in the given String.

Sample Input	Sample Output
String: Bangladesh Substring: lad	Match found
String: Paragraph Substring: rag	Match found
String: America Substring: rice	No match found

4. Write a C program to generate the following pattern.

```
"C:\Users\lenovo\Documents\C-Free\Tem
Enter number of rows
9
9      9
8      8
7      7
6 6
5
4 4
3 3
2      2
1      1
Press any key to continue . . .
```