

# Increasing Array

You are given an array of **n** integers. You want to modify the array so that it is increasing, meaning every element is at least as large as the previous element. On each move, you can increase or decrease the value of any element by one. What is the minimum number of moves required?

## Input Format

- The first input line contains an integer **n**: the size of the array.
- Then, the second line contains **n** integers **x<sub>1</sub>**,**x<sub>2</sub>**,... ,**x<sub>n</sub>**: the contents of the array.

## Constraints

- $1 \leq n \leq 2 \times 10^5$
- $1 \leq x_i \leq 10^9$

## Output Format

- Print the minimum number of moves.

## Sample Input 0

```
5
3 8 5 6 5
```

## Sample Output 0

```
4
```