Trekking Across the Himalayan Trail

Time: 1s | Memory: 256 MB

Problem Statement

A trekker is traveling through the rugged mountain trails of Bhutan. The path consists of a sequence of checkpoints, each at a different elevation.

Due to steep geography, climbing uphill consumes energy proportional to elevation gain

Descending downhill requires no energy (gravity assists movement)

The trekker wants to estimate how much energy will be required for the entire journey.

Your task is to compute the total uphill energy expenditure along the route.

Input Format

Line 1: integer N

Line 2: N integers — elevations in order.

Output Format

A single integer — total uphill energy.

Constraints / Notes

$1 \le N \le 10^5$ | $0 \le \text{elevation} \le 10^9$

Sample Input

```
5
1 3 2 5 4
```

Sample Output

```
5
```