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Rain Water

? Ask Doubt

Time-Limit: 1 sec Score: 0/100 Difficulty :

Memory: 256 MB Accepted Submissions: 100 Relevant For: AZ-201

Description

You are given an array *A*, where each *i*th index represents an elevation on that index. The width of each bar is 1. You have to compute how much water it is able to trap after raining.

Input Format

The first line of the input contains one integer *T* - the number of test cases. Then *T* test cases follow.
The first line of each test case contains one integer *N* - the length of the array.
The second line of each test case contains *N* space-separated integers, where A_i denotes the height of the *i*th bar.

Output Format

For each test case, you have to print how much water it is able to trap after raining.

Constraints

$1 \le T \le 100$
$1 \le N \le 10^5$
$0 \le A_i \le 10^5$

Sample Input 1

Copy

```
3
3
3 0 2
5
2 0 0 4 3
5
1 2 3 1 5
```

Sample Output 1

Copy

```
2
4
2
```

C++14[GCC]

Submit

```
1
```