

Trap Rain Water 1

Given n non-negative integers representing an elevation map where the width of each bar is 1, compute how much water it is able to trap after raining.

Input Format

- Total number of test-cases.
- For each test-case, first line is the size of the array n
- Next line will have n integers separated by space.

Constraints

Desired time-complexity is $O(n)$.

Output Format

Amount of water trapped as integer.

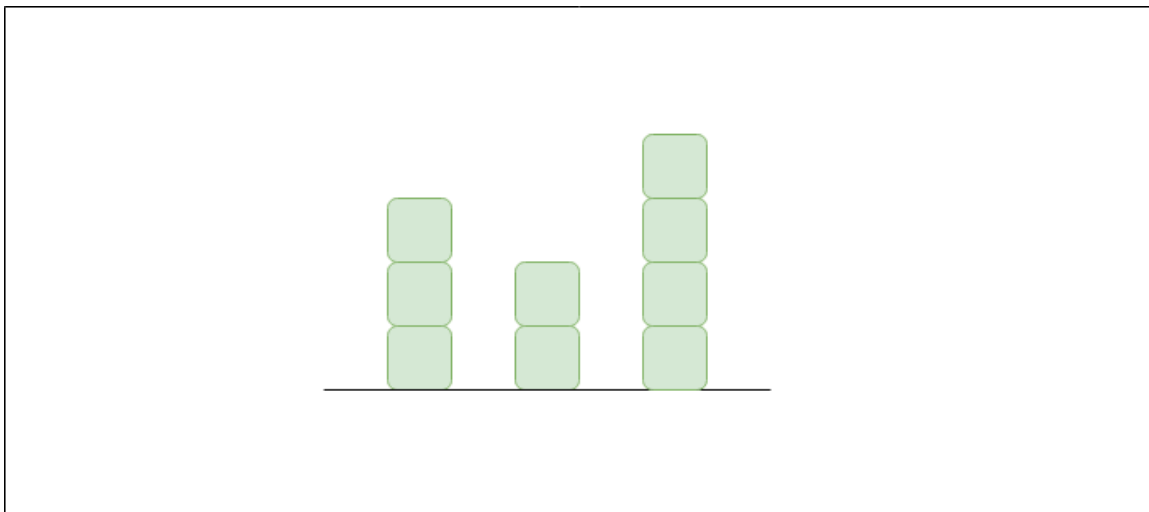
Sample Input 0

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

Sample Output 0

```
7
```

Explanation 0



We can trap "3 units" of water between 3 and 2, "1 unit" on top of bar 2 and "3 units" between 2 and 4.