# 42. Trapping Rain Water

# Difficulty: Hard

https://leetcode.com/problems/trapping-rain-water

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

### Example 1:



Input: height = [0,1,0,2,1,0,1,3,2,1,2,1]

Output: 6

Explanation: The above elevation map (black section) is represented by array [0,1,0,2,1,0,1,3,2,1,2,1]. In this case, 6 units of rain water (blue section) are being trapped.

### Example 2:

Input: height = [4,2,0,3,2,5]
Output: 9

#### **Constraints:**

- n == height.length
- 1 <= n <= 2 \* 10<sup>4</sup>
- 0 <= height[i] <= 10<sup>5</sup>