

Given an array **arr[]** of **N** non-negative integers representing the height of blocks. If width of each block is 1, compute how much water can be trapped between the blocks during the rainy season.

Example 1:

Input:

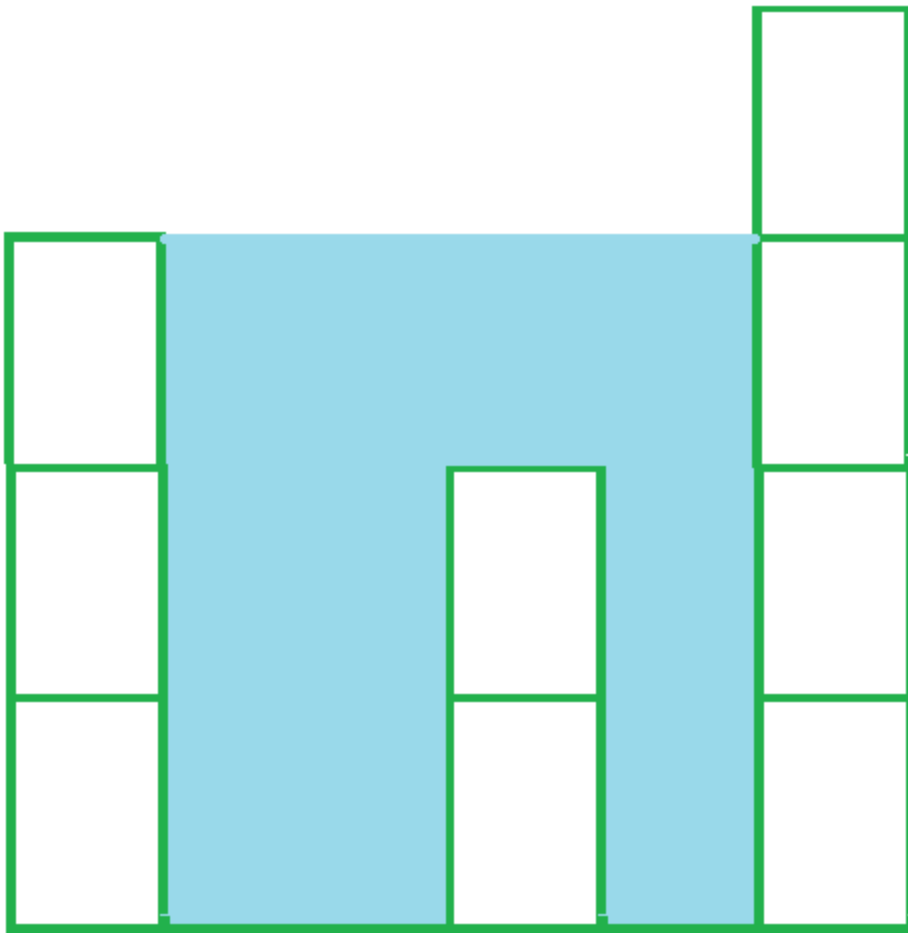
N = 6

arr[] = {3,0,0,2,0,4}

Output:

10

Explanation:



Bars for input {3, 0, 0, 2, 0, 4}

Total trapped water = 3 + 3 + 1 + 3 = 10

Example 2:

Input:

N = 4

arr[] = {7,4,0,9}

Output:

10

Explanation:

Water trapped by above
block of height 4 is 3 units and above
block of height 0 is 7 units. So, the
total unit of water trapped is 10 units.

Example 3:

Input:

$N = 3$

$\text{arr}[] = \{6, 9, 9\}$

Output:

0

Explanation:

No water will be trapped.

Your Task:

You don't need to read input or print anything. The task is to complete the function **trappingWater()** which takes arr and N as input parameters and returns the total amount of water that can be trapped.

Expected Time Complexity: $O(N)$

Expected Auxiliary Space: $O(N)$

Constraints:

$3 \leq N \leq 10^7$

$0 \leq A_i \leq 10^8$