AlgoExpert Quad Layout Python 12px Sublime Monokai 00:00:00

 Prompt
 Scratchpad
 Our Solution(s)
 Video Explanation

Run Code

Solution 1

```
1 \, # Copyright @ 2020 AlgoExpert, LLC. All rights reserved.
 3 # O(n) time | O(n) space
 4 def waterArea(heights):
       maxes = [0 for x in heights]
       leftMax = 0
        for i in range(len(heights)):
          height = heights[i]
maxes[i] = leftMax
 8
9
10
          leftMax = max(leftMax, height)
       rightMax = 0
11
        for i in reversed(range(len(heights))):
12
          height = heights[i]
13
           minHeight = min(rightMax, maxes[i])
14
15
           if height < minHeight:</pre>
16
            maxes[i] = minHeight - height
           else:
17
18
             maxes[i] = 0
19
           rightMax = max(rightMax, height)
20
        return sum(maxes)
```