Trapping Rain Water

My Submissions (/problems/trapping-rain-water/submissions/)

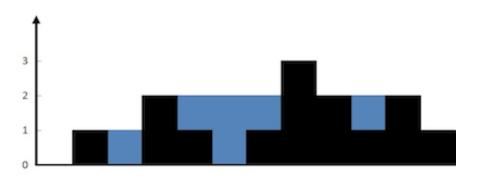
Total Question Solution

Accepted: 47108 Total Submissions: 156088 Difficulty: Hard

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.

For example,

Given [0,1,0,2,1,0,1,3,2,1,2,1], return 6.



The above elevation map 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. **Thanks Marcos** for contributing this image!

Show Tags

Show Similar Problems

Have you met this question in a real interview? Yes No

Discuss (/discuss/questions/oj/trapping-rain-water)

Python

 \mathcal{Z}

```
1
    class Solution(object):
         def trap(self, height):
 2
 3
 4
             :type height: List[int]
 5
             :rtype: int
 6
 7
             stack = [-1]
 8
             rightmax=0;
 9
             for i in range(len(height)-1,-1,-1):
10
                 if rightmax < height[i]:</pre>
                      stack.append(i)
11
   Ϫ Send Feedback (majhtonadmin@etechcopteլcom?subject=Feedback)
12
13
             leftmax=0
```

```
14
            sum=0
15
            for i in range(0,len(height)):
                 if i == stack[len(stack)-1]:stack.pop()
16
                 if stack[len(stack)-1] == -1:rightmax=-1;
17
18
                 else:rightmax = height[stack[len(stack)-1]]
                 if height[i] < leftmax and height[i] < rightmax:</pre>
19
                     sum+=min(leftmax,rightmax) - height[i]
20
                 leftmax = max(leftmax,height[i])
21
22
            return sum
```

Custom Testcase

[0,1,0,2,1,0,1,3,2,1,2,1]

One line for one parameter.

Run Code

Submit Solution

Run Code Status: Finished

Run Code Result:
Your input
[0,1,0,2,1,0,1,3,2,1,2,1]
Your answer
6
Expected answer
6

Submission Result: Accepted (/submissions/detail/39828630/)

More Details > (/submissions/detail/39828630/)

Next challenges: (M) Product of Array Except Self (/problems/product-of-array-except-self/)

Share your acceptance!

Frequently Asked Questions (/faq/) | Terms of Service (/tos/)

Privacv

Copyright © 2015 LeetCode