DAY 16

INTERVIEW BIT PROBLEMS :

1. Rain Water Trapped

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

The only argument given is integer array A.

Output Format

Return the total water it is able to trap after raining..

For Example

Input 1:

A = [0,1,0,2,1,0,1,3,2,1,2,1]

Output 1:

6

Explaination 1: In this case, 6 units of rain water (blue section) are being trapped.

CODE :

PYTHON

```
class Solution:
    # @param A : tuple of integers
    # @return an integer
    def trap(self, A):
        n=len(A)
        previous=A[0]
        p_ind=0
        rain_h20=0
        temp=0
        for i in range(1,n):
            if A[i]>=previous:
                previous=A[i]
                p_ind=i
                temp=0
            else:
                rain_h20+=previous-A[i]
                temp+=previous-A[i]
        if p_ind<(n-1):
            rain_h20-=temp
            previous=A[n-1]
            for k in range(n-1,p_ind-1,-1):
                if A[k]>=previous:
                    previous=A[k]
                else:
                    rain_h20+=previous-A[k]
        return rain_h20
```