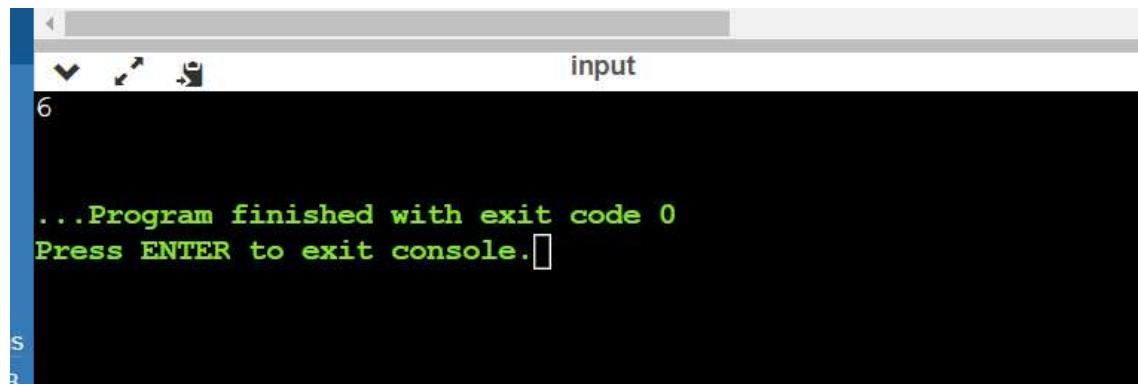**Problem 4:** Given an array of non-negative integers representation elevation of ground. Your task is to find the water that can be trapped after rain.

```python
def trap_water(height):
    left = 0
    right = len(height) - 1
    left_max = 0
    right_max = 0
    water_trapped = 0

    while left <= right:
        if height[left] <= height[right]:
            if height[left] > left_max:
                left_max = height[left]
            else:
                water_trapped += left_max - height[left]
            left += 1
        else:
            if height[right] > right_max:
                right_max = height[right]
            else:
                water_trapped += right_max - height[right]
            right -= 1

    return water_trapped
height = [0,1,0,2,1,0,1,3,2,1,2,1]
print(trap_water(height))
```

input

```
6



...Program finished with exit code 0
Press ENTER to exit console.
```