Week 5 Assignment

DAY 2 ASSIGNMENT

Directions: Please answer the following questions on a VS-Code Editor page. Push up the code to a branch on GitHub called: week5-day2

Due: Thursday by 11 PM CST

Problem #1: Multiple Pointers Pattern

```javascript
/*
Write a function called subsequence which takes in two strings and checks whether
the characters in the first string form a subsequence of the characters in the second string.
In other words, the function should check whether the characters in the first string
appear somewhere in the second string, without their order changing.

Write your solution with time complexity O(n) and space O(1)
*/

const subsequence = (str1, str2) => {

}

// Test Cases:

// subsequence('hello', 'hello world') true
// subsequence('sing', 'sting') true
// subsequence('abc', 'abracadabra')  true
// subsequence('abc', 'acb') false
```

# Problem #2: Multiple Pointers Pattern

You are given an integer array `height` of length `n`. There are `n` vertical lines drawn such that the two endpoints of the `i`th line are `(i, 0)` and `(i, height[i])`.

Find two lines that together with the x-axis form a container, such that the container contains the most water.

Return *the maximum amount of water a container can store*.

Notice that you may not slant the container.

Example 1:
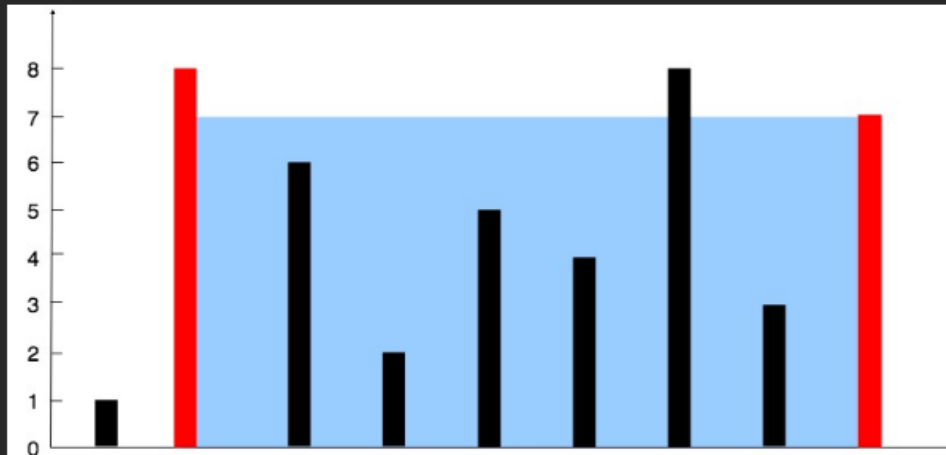

```
Input: height = [1,8,6,2,5,4,8,3,7]
Output: 49
Explanation: The above vertical lines are represented by array [1,8,6,2,5,4,8,3,7]. In this case, the
max area of water (blue section) the container can contain is 49.
```

Example 2:

```
Input: height = [1,1]
Output: 1
```

```
/**
 * @param {number[]} height
 * @return {number}
 */
const maxArea = (height) => {

};
```