

# Problem 11: Container With Most Water

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 59.00%

**Paid Only:** No

**Tags:** Array, Two Pointers, Greedy

## Problem Description

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`

**Constraints:**

`n == height.length` `2 <= n <= 105` `0 <= height[i] <= 104`

## Code Snippets

### C++:

```
class Solution {  
public:  
    int maxArea(vector<int>& height) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public int maxArea(int[] height) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def maxArea(self, height: List[int]) -> int:
```