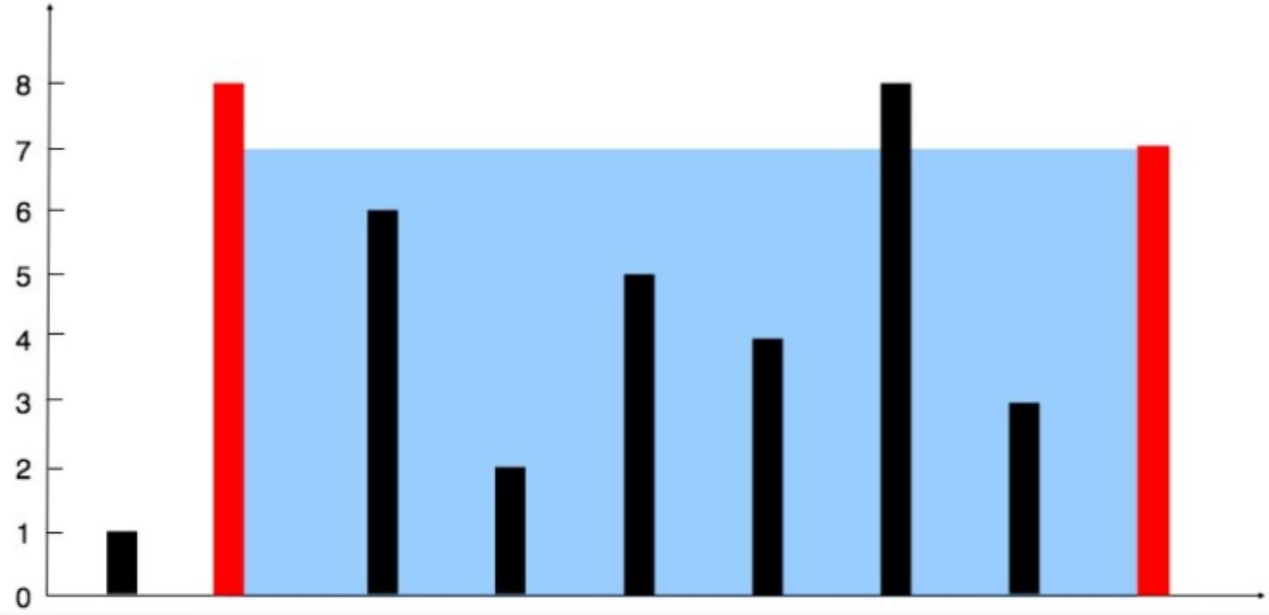
11. Container With Most Water

Medium 9274 707 Add to List Share

Given n non-negative integers $a_1, a_2, ..., a_n$, where each represents a point at coordinate (i, a_i). n vertical lines are drawn such that the two endpoints of the line i is at (i, a_i) and $(i, 0)$. Find two lines, which, together with the x-axis forms a container, such that the container contains the most water.

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

Example 3:

Input: height = [4,3,2,1,4]
Output: 16

Example 4:

Input: height = [1,2,1]
Output: 2

Constraints:

- `n == height.length`
- `2 <= n <= 10^5`
- `0 <= height[i] <= 10^4`