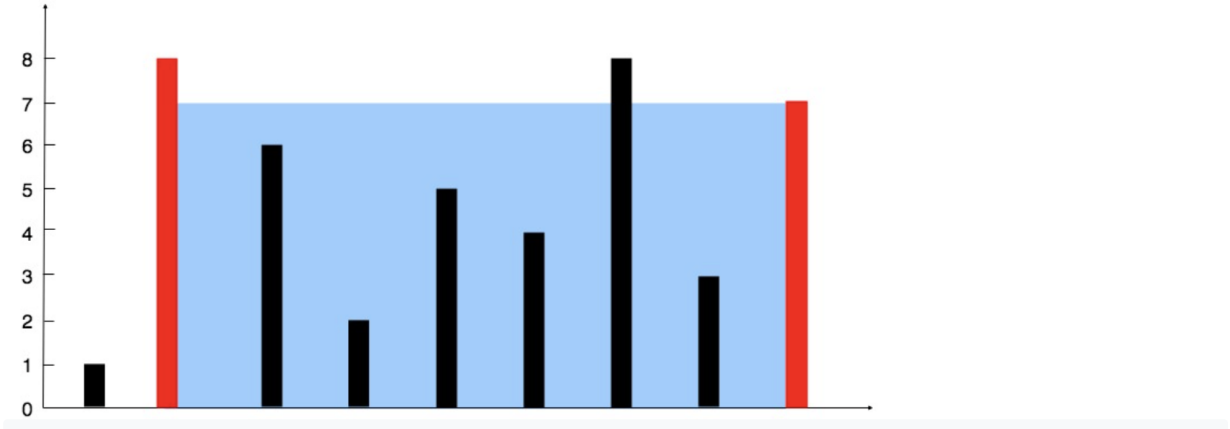
Challenge

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

Find two lines that together with the x-axis form a container, such that the area is the biggest.

Return the maximum container area.
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 (blue section) of the container is 49.

Example 2:

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

Constraints

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

Required:

- Unit Testing
- Any Java Version
- Expose it as Rest Api - Spring boot
- Upload the Code to Github and share the link