Container with the Most Water

Try to solve the Container with the Most Water problem.

We'll cover the following

Statement

You're 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 that holds as much water as possible. Return the maximum amount of water a container can store.

> **Note:** You may not slant the container.

Constraints:

- $n =$ `height.length`
- $2 \leq n \leq 10^3$
- $0 \leq$ `height[i]` $\leq 10^3$

Examples

Sample example 1

Input

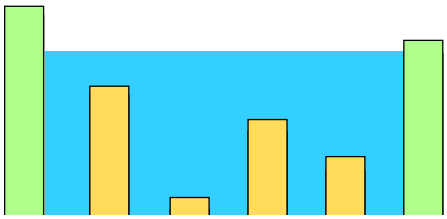
height	2	8	6	3	5	4	7

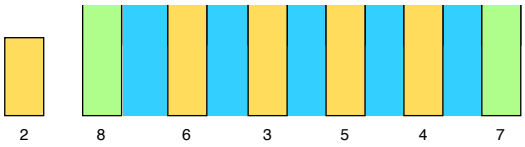
Output

Output	35

Explanation

There are five blocks of water between the column with the heights 7 and 8. We select the minimum of the two heights, which is 7 and multiply that by 5 to get 35.





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Sample example 2

Input

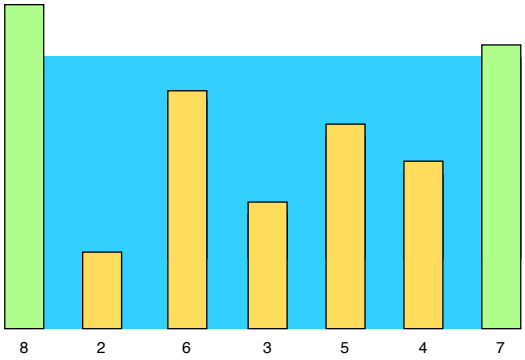
height	8	2	6	3	5	4	7

Output

Output	42

Explanation

There are six blocks of water between the column with the heights 7 and 8. We select the minimum of the two heights, which is 7 and multiply that by 6 to get 42.



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Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:

Container with the Most Water

1 What is the maximum amount of water a container can store if we have the following input?

height = [1, 1]

A) 1

B) 2

C) 0

Submit Answer

Question 1 of 2
0 attempted

Reset Quiz

Try it yourself

Implement your solution in the following coding playground.

Java

usercode > Solution.java

```java
import java.util.*;
public class Solution{
    public static int containerWithMostWater(int[] height) {
        return -1;
    }
}
```

Powered by AI

Submit

Test Cases | Results

Case 1 | Case 2 | Case 3

Input #1

[1,8,6,2,5,4,8,3,7]

Container with the Most Water

Hide Hint

You might want to go over the Two Pointers pattern again.

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Number of 1 Bits

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Evaluate Reverse Poli...

Mark as Completed