Problem 1762: Buildings With an Ocean View

Problem Information

Difficulty: Medium
Acceptance Rate: 80.88%
Paid Only: Yes
Tags: Array, Stack, Monotonic Stack

Problem Description

There are `n` buildings in a line. You are given an integer array `heights` of size `n` that represents the heights of the buildings in the line.

The ocean is to the right of the buildings. A building has an ocean view if the building can see the ocean without obstructions. Formally, a building has an ocean view if all the buildings to its right have a **smaller** height.

Return a list of indices **(0-indexed)** of buildings that have an ocean view, sorted in increasing order.

Example 1:

Input: heights = [4,2,3,1] **Output:** [0,2,3] **Explanation:** Building 1 (0-indexed) does not have an ocean view because building 2 is taller.

Example 2:

Input: heights = [4,3,2,1] **Output:** [0,1,2,3] **Explanation:** All the buildings have an ocean view.

Example 3:

Input: heights = [1,3,2,4] **Output:** [3] **Explanation:** Only building 3 has an ocean view.

Constraints:

* `1 <= heights.length <= 105` * `1 <= heights[i] <= 109`

Code Snippets

C++:

```cpp
class Solution {
public:
vector<int> findBuildings(vector<int>& heights) {


}
};
```

Java:

```java
class Solution {
public int[] findBuildings(int[] heights) {


}
}
```

Python3:

```python
class Solution:
def findBuildings(self, heights: List[int]) -> List[int]:
```