Problem 34: Find First and Last Position of Element in Sorted Array

Problem Information

Difficulty: Medium
Acceptance Rate: 47.82%
Paid Only: No
Tags: Array, Binary Search

Problem Description

Given an array of integers `nums` sorted in non-decreasing order, find the starting and ending position of a given `target` value.

If `target` is not found in the array, return `[-1, -1]`.

You must write an algorithm with `O(log n)` runtime complexity.

Example 1:

Input: nums = [5,7,7,8,8,10], target = 8 **Output:** [3,4]

Example 2:

Input: nums = [5,7,7,8,8,10], target = 6 **Output:** [-1,-1]

Example 3:

Input: nums = [], target = 0 **Output:** [-1,-1]

Constraints:

* `0 <= nums.length <= 105` * `-109 <= nums[i] <= 109` * `nums` is a non-decreasing array. * `-109 <= target <= 109`

Code Snippets

C++:

```
class Solution {
public:
vector<int> searchRange(vector<int>& nums, int target) {

}
};
```

Java:

```
class Solution {
public int[] searchRange(int[] nums, int target) {

}
}
```

Python3:

```
class Solution:
def searchRange(self, nums: List[int], target: int) -> List[int]:
```