

Problem 1150: Check If a Number Is Majority Element in a Sorted Array

Problem Information

Difficulty: **Easy**

Acceptance Rate: 59.88%

Paid Only: Yes

Tags: Array, Binary Search

Problem Description

Given an integer array `nums` sorted in non-decreasing order and an integer `target`, return `true` if `target` is a **majority** element, or `false` otherwise.

A **majority** element in an array `nums` is an element that appears more than $\text{nums.length} / 2$ times in the array.

Example 1:

Input: `nums = [2,4,5,5,5,5,6,6]`, `target = 5` **Output:** `true` **Explanation:** The value 5 appears 5 times and the length of the array is 9. Thus, 5 is a majority element because $5 > 9/2$ is true.

Example 2:

Input: `nums = [10,100,101,101]`, `target = 101` **Output:** `false` **Explanation:** The value 101 appears 2 times and the length of the array is 4. Thus, 101 is not a majority element because $2 > 4/2$ is false.

Constraints:

$1 \leq \text{nums.length} \leq 1000$ $1 \leq \text{nums}[i], \text{target} \leq 109$ `nums` is sorted in non-decreasing order.

Code Snippets

C++:

```
class Solution {  
public:  
    bool isMajorityElement(vector<int>& nums, int target) {  
  
    }  
};
```

Java:

```
class Solution {  
    public boolean isMajorityElement(int[] nums, int target) {  
  
    }  
}
```

Python3:

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