35. Search Insert Position

Easy 7290 394 Add to List Share

Given a sorted array of distinct integers and a target value, return the index if the target is found. If not, return the index where it would be if it were inserted in order.

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

Example 1:

```
Input: nums = [1,3,5,6], target = 5
Output: 2
```

Example 2:

```
Input: nums = [1,3,5,6], target = 2
Output: 1
```

Example 3:

```
Input: nums = [1,3,5,6], target = 7
Output: 4
```

Constraints:

- `1 <= nums.length <= 10^4`
- `-10^4 <= nums[i] <= 10^4`
- `nums` contains **distinct** values sorted in **ascending** order.
- `-10^4 <= target <= 10^4`

Accepted 1,347,582 Submissions 3,182,322

Seen this question in a real interview before? Yes No

Companies

Java Autocomplete

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

        int start = 0;
        int end = nums.length - 1;

        while(start <= end){

            int mid = start + (end - start) / 2;

            if(nums[mid] == target)
                return mid;
            else if(nums[mid] < target)
                start = mid + 1;
            else
                end = mid - 1;
        }

        return start;
    }
}
```

Testcase Run Code Result Debugger

Accepted Runtime: 0 ms

Your input
```
[1,3,5,6]
5
```

Output
```
2
1
```

Diff

Expected
```
2
1
```