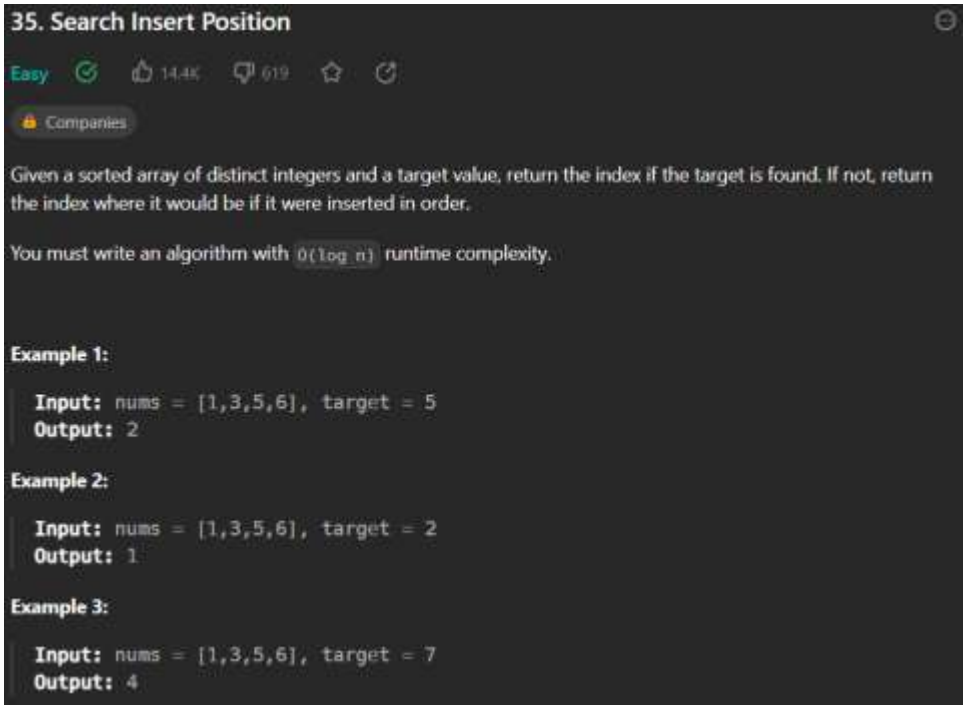
LEETCODE SOLUTIONS - YOGESH MUNEES



35. Search Insert Position

Easy 14.4K 619

Companies

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
```

Solution:

```
class Solution(object):
    def searchInsert(self, nums, target):
        """
        :type nums: List[int]
        :type target: int
        :rtype: int
        """
        n = len(nums)
        if target <= nums[0]:
            return 0
        elif target > nums[n-1]:
            return n
        else:
            start,end = 0,n-1
            while start <= end:
                mid = (start+end)/2
                if nums[mid] > target:
                    end = mid - 1
                    if end >= 0:
                      if nums[end] < target:
                        return end + 1
                    else:
                        return 0
                elif nums[mid] < target:
                    start = mid + 1
```

```
                if start < len(nums):
                  if nums[start] > target:
                    return start
                else:
                    return len(nums)
            else:
                return mid
```