

35. Search Insert Position

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:

$1 \leq \text{nums.length} \leq 10^4$

$-10^4 \leq \text{nums}[i] \leq 10^4$

nums contains distinct values sorted in ascending order.

$-10^4 \leq \text{target} \leq 10^4$