

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.

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**.

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

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

The first row is nums.length

Second row is nums list

The last row is target

Example:

Input: 4 1 3 5 6 5	nums = [1,3,5,6], target = 5
Output: 2	2

Input: 4 1 3 5 6 2	nums = [1,3,5,6], target = 2
Output: 1	1

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