

1. Given an input string (s) and a pattern (p), implement wildcard pattern matching with support for '?' and '\*' where:
  - '?' Matches any single character.
  - '\*' Matches any sequence of characters (including the empty sequence).

The matching should cover the entire input string (not partial).

Example 1:

Input: s = "aa", p = "a"

Output: false

Explanation: "a" does not match the entire string "aa".

Example 2:

Input: s = "aa", p = "\*"

Output: true

Explanation: '\*' matches any sequence.

Example 3:

Input: s = "cb", p = "?a"

Output: false

Explanation: '?' matches 'c', but the second letter is 'a', which does not match 'b'.

Example 4:

Input: s = "adceb", p = "\*\*a\*b"

Output: true

Explanation: The first '\*' matches the empty sequence, while the second '\*' matches the substring "dce".

Example 5:

Input: s = "acdcab", p = "a\*c?b"

Output: false

Constraints:

- $0 \leq s.length, p.length \leq 2000$
- s contains only lowercase English letters.
- p contains only lowercase English letters, '?' or '\*'.

2. 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.

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

Example 4:

Input: nums = [1,3,5,6], target = 0

Output: 0

Example 5:

Input: nums = [1], target = 0

Output: 0

Constraints:

- $1 \leq \text{nums.length} \leq 104$
- $-104 \leq \text{nums}[i] \leq 104$
- nums contains distinct values sorted in ascending order.
- $-104 \leq \text{target} \leq 104$

3.