

# 516. Longest Palindromic Subsequence

## Difficulty : Medium

<https://leetcode.com/problems/longest-palindromic-subsequence>

Given a string  $s$ , find *the longest palindromic **subsequence**'s length* in  $s$ .

A **subsequence** is a sequence that can be derived from another sequence by deleting some or no elements without changing the order of the remaining elements.

### Example 1:

**Input:**  $s = \text{"bbbab"}$

**Output:** 4

**Explanation:** One possible longest palindromic subsequence is "bbbb".

### Example 2:

**Input:**  $s = \text{"cbbd"}$

**Output:** 2

**Explanation:** One possible longest palindromic subsequence is "bb".

### Constraints:

- $1 \leq s.length \leq 1000$
- $s$  consists only of lowercase English letters.