

1250. Longest Common Subsequence

Difficulty : Medium

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

Given two strings `text1` and `text2`, return *the length of their longest **common subsequence***. If there is no **common subsequence**, return 0.

A **subsequence** of a string is a new string generated from the original string with some characters (can be none) deleted without changing the relative order of the remaining characters.

- For example, "ace" is a subsequence of "abcde".

A **common subsequence** of two strings is a subsequence that is common to both strings.

Example 1:

Input: `text1 = "abcde", text2 = "ace"`

Output: 3

Explanation: The longest common subsequence is "ace" and its length is 3.

Example 2:

Input: `text1 = "abc", text2 = "abc"`

Output: 3

Explanation: The longest common subsequence is "abc" and its length is 3.

Example 3:

Input: `text1 = "abc", text2 = "def"`

Output: 0

Explanation: There is no such common subsequence, so the result is 0.

Constraints:

- $1 \leq \text{text1.length}, \text{text2.length} \leq 1000$
- `text1` and `text2` consist of only lowercase English characters.