## 1250. Longest Common Subsequence

## **Difficulty: Medium**

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

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:

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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 <= text1.length, text2.length <= 1000
- text1 and text2 consist of only lowercase English characters.