

1143. Longest Common Subsequence

Description

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

