



# 1143. Longest Common Subsequence

Solved 

Medium

 Topics

 Companies

 Hint

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:**

```
class Solution {
    func longestCommonSubsequence(_ text1: String, _ text2: String)
    -> Int {
        var a:[Int] = Array(repeating:0, count:text1.count+1)
        var dp:[[Int]] = Array(repeating:a, count:text2.count+1)
        let t1 = Array(text1)
        let t2 = Array(text2)

        for i in (1...text2.count) {
            for j in (1...text1.count) {
                if(t2[i-1] == t1[j-1]) {
                    dp[i][j] = 1 + dp[i-1][j-1]
                } else {
                    dp[i][j] = max(dp[i-1][j],dp[i][j-1])
                }
            }
        }
    }
}
```

```
        }  
    }  
  
    return dp[text2.count][text1.count]  
}  
}
```