AlgoExpert

Quad Layout

Go

12px

Sublime

Monokai

00:00:00

Prompt Scratchpad Our Solution(s) Video Explanation

Run Code

Solution 1 Solution 2 Solution 3 Solution 4

```go
// Copyright © 2020 AlgoExpert, LLC. All rights reserved.

package main

// O(nm*min(n, m)) time | O(nm*min(n, m)) space
func LongestCommonSubsequence(s1 string, s2 string) string {
  lcs := make([][]string, len(s2)+1)
  for i := range lcs {
    lcs[i] = make([]string, len(s1)+1)
  }
  for i := 1; i < len(lcs); i++ {
    for j := 1; j < len(lcs[i]); j++ {
      if s2[i-1] == s1[j-1] {
        lcs[i][j] = lcs[i-1][j-1] + string(s2[i-1])
      } else {
        if len(lcs[i-1][j]) < len(lcs[i][j-1]) {
          lcs[i][j] = lcs[i][j-1]
        } else {
          lcs[i][j] = lcs[i-1][j]
        }
      }
    }
  }
  return lcs[len(s2)][len(s1)]
}
```