

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

Solution 2

Solution 3

Solution 4

Solution 1

Solution 2

Solution 3

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Program {
4     // O(nm) time | O(nm) space
5     func longestCommonSubsequence(firstString: String, secondString: String) -> String {
6         var lcs = [(String, Int, Int, Int)]()
7
8         for _ in stride(from: 0, to: firstString.count + 1, by: 1) {
9             var row = [(String, Int, Int, Int)]()
10
11             for _ in stride(from: 0, to: secondString.count + 1, by: 1) {
12                 let tuple = ("", 0, 0, 0)
13                 row.append(tuple)
14             }
15
16             lcs.append(row)
17         }
18
19         for i in stride(from: 1, to: firstString.count + 1, by: 1) {
20             for j in stride(from: 1, to: secondString.count + 1, by: 1) {
21                 let firstIndex = firstString.index(firstString.startIndex, offsetBy: i - 1)
22                 let secondIndex = secondString.index(secondString.startIndex, offsetBy: j - 1)
23
24                 if firstString[firstIndex] == secondString[secondIndex] {
25                     let char = String(firstString[firstIndex])
26                     lcs[i][j] = (char, lcs[i - 1][j - 1].1 + 1, i - 1, j - 1)
27                 } else {
28                     if lcs[i - 1][j].1 > lcs[i][j - 1].1 {
29                         lcs[i][j] = ("", lcs[i - 1][j].1, i - 1, j)
30                     } else {
31                         lcs[i][j] = ("", lcs[i][j - 1].1, i, j - 1)
32                     }
33                 }
34             }
35         }
36
37         return lcs[lcs.count - 1][lcs[lcs.count - 1].count].0
38     }
39 }
```

```
1 class Program {
2     func longestCommonSubsequence(firstString: String, secondString: String) -> String {
3         // Write your code here.
4         return []
5     }
6 }
7
```

Our Tests

Custom Output

Submit Code

```
1 class Program {
2     func longestCommonSubsequence(firstString: String, secondString: String) -> String {
3         // Write your code here.
4         return []
5     }
6 }
```

```
1 class Program {
2     func longestCommonSubsequence(firstString: String, secondString: String) -> String {
3         // Write your code here.
4         return []
5     }
6 }
```

Run or submit code when you're ready.