AlgoExpert

Quad Layout

Python

Sublime

Solution 1 Solution 2

Monokai

00:00:

Our Solution(s) Run Code

```
Your Solutions
```

14px

```
Run Code
```

Solution 3

```
Solution 1 Solution 2 Solution 3
                                       Solution 4
 1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved.
   # O(nm) time | O(nm) space
    def longestCommonSubsequence(str1, str2):
        lengths = [[0 for x in range(len(str1) + 1)] for y in range(len(s
        for i in range(1, len(str2) + 1):
           for j in range(1, len(str1) + 1):
                if str2[i - 1] == str1[j - 1]:
                    lengths[i][j] = lengths[i - 1][j - 1] + 1
10
                    lengths[i][j] = max(lengths[i - 1][j], lengths[i][j -
11
        return buildSequence(lengths, str1)
12
13
14
15 def buildSequence(lengths, string):
       sequence = []
16
17
        i = len(lengths) - 1
        j = len(lengths[0]) - 1
18
19
        while i != 0 and j != 0:
20
            if lengths[i][j] == lengths[i - 1][j]:
21
               i -= 1
22
            \textbf{elif} \ \texttt{lengths[i][j]} \ \texttt{==} \ \texttt{lengths[i][j - 1]} :
23
25
                sequence.append(string[j - 1])
26
                i -= 1
27
                j -= 1
28
        return list(reversed(sequence))
```

```
1 def longestCommonSubsequence(str1, str2):
      # Write your code here.
3
      pass
```



Run or submit code when you're ready.