

PromptScratchpadOur Solution(s)Video Explanation

Run Code

Solution 1Solution 2Solution 3Solution 4

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // O(nm*min(n, m)) time | O(nm*min(n, m)) space
4 function longestCommonSubsequence(str1, str2) {
5   const lcs = [];
6   for (let i = 0; i < str2.length + 1; i++) {
7     const row = new Array(str1.length + 1).fill([]);
8     lcs.push(row);
9   }
10  for (let i = 1; i < str2.length + 1; i++) {
11    for (let j = 1; j < str1.length + 1; j++) {
12      if (str2[i - 1] === str1[j - 1]) {
13        lcs[i][j] = lcs[i - 1][j - 1].concat(str2[i - 1]);
14      } else {
15        lcs[i][j] = lcs[i - 1][j].length > lcs[i][j - 1].length ? lcs[i - 1][j] : lcs[i][j - 1];
16      }
17    }
18  }
19  return lcs[str2.length][str1.length];
20 }
21
22 exports.longestCommonSubsequence = longestCommonSubsequence;
23
```