AlgoExpert Quad Layout Swift 12px Sublime Monokai 00:00:00

Your Solutions

6 }

Prompt Scratchpad Our Solution(s) Video Explanation Run Code

Solution 1

42

Solution 2

```
1\, // Copyright @ 2020 AlgoExpert, LLC. All rights reserved.
    class Program {
         // O(nd) time | O(min(n, m) space)
         \begin{tabular}{ll} func & levenshtein Distance (first String: String, second String: String) -> Int \{ \end{tabular} \label{fig:string: String} \end{tabular}
              let small = firstString.count < secondString.count ? firstString : secondString</pre>
              let big = firstString.count >= secondString.count ? firstString : secondString
 8
 9
              var evenEdits = [Int]()
10
              var oddEdits = Array(repeating: 0, count: small.count + 1)
11
12
              for i in 0 ..< small.count + 1 {</pre>
                  {\sf evenEdits.append(i)}
13
14
15
              for i in 1 ... big.count + 1 \{
16
17
                  if i % 2 == 1 {
18
                       optimizedLevenshteinHelper(bigIndex: i, smallString: small, bigString: big,
19
20
                       optimizedLevenshteinHelper(bigIndex: i, smallString: small, bigString: big,
21
22
23
24
              return big.count % 2 == 0 ? evenEdits[small.count] : oddEdits[small.count]
25
26
27
         \textbf{func optimized Levenshtein Helper} (\texttt{bigIndex: Int, smallString: String, bigString: String,}
28
              currentEdits[0] = bigIndex
29
30
              for j in 1 ... smallString.count + 1 {
                  let firstIndex = bigString.index(bigString.startIndex, offsetBy: bigIndex - 1)
31
32
                  let secondIndex = smallString.index(smallString.startIndex, offsetBy: j - 1)
33
                  if bigString[firstIndex] == smallString[secondIndex] {
34
                       currentEdits[j] = previousEdits[j - 1]
35
36
                  } else {
37
                       \texttt{currentEdits}[\texttt{j}] = \texttt{1} + \texttt{min}(\texttt{previousEdits}[\texttt{j}], \ \texttt{min}(\texttt{previousEdits}[\texttt{j} - \texttt{1}], \ \texttt{currentEdits}[\texttt{min}])
38
39
40
41 }
```

Run Code

Custom Output Raw Output Submit Code

Run or submit code when you're ready.