

Our Solution(s)		Run Code
Solution 1	Solution 2	
<pre>1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved. 2 3 class Program { 4     // O(nd) time   O(min(n, m) space) 5     func levenshteinDistance(firstString: String, secondString: String) Int { 6         let small = firstString.count &lt; secondString.count ? firstString : secondString 7         let big = firstString.count &gt;= 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 ..&lt; small.count + 1 { 13            evenEdits.append(i) 14        } 15 16        for i in 1 ..&lt; big.count + 1 { 17            if i % 2 == 1 { 18                oddEdits[i] = optimizedLevenshteinHelper(bigIndex: i, smallString: small, currentEdits: evenEdits) 19            } else { 20                evenEdits[i] = optimizedLevenshteinHelper(bigIndex: i, smallString: small, currentEdits: oddEdits) 21            } 22        } 23 24        return big.count % 2 == 0 ? evenEdits[big.count] : oddEdits[big.count] 25    } 26 27    func optimizedLevenshteinHelper(bigIndex: Int, smallString: String, currentEdits: [Int]) Int { 28        currentEdits[0] = bigIndex 29 30        for j in 1 ..&lt; smallString.count + 1 { 31            let firstIndex = bigString.index(bigString.startIndex, offsetBy: bigIndex - 1) 32            let secondIndex = smallString.index(smallString.startIndex, offsetBy: j - 1) 33            let cost = firstString[firstIndex] == smallString[secondIndex] ? 0 : 1 34            let iBefore = currentEdits[j - 1] 35            let jBefore = currentEdits[j - 1] - 1 36            let iLeft = currentEdits[j - 2] 37            let jLeft = currentEdits[j - 2] - 1 38            currentEdits[j] = min(iBefore, jBefore, iLeft, jLeft) + cost 39        } 40        return currentEdits[smallString.count] 41    } 42}</pre>		

Your Solutions			Run Code
Solution 1	Solution 2	Solution 3	
<pre>1 class Program { 2     func levenshteinDistance(firstString: String, secondString: String) Int { 3         // Write your code here. 4         return -1 5     } 6 } 7</pre>			

