

**Solution 1      Solution 2**

```

1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 using System;
4 public class Program {
5     // O(nm) time | O(min(n, m)) space
6     public static int LevenshteinDistance(string str1, string str2) {
7         string small = str1.Length < str2.Length ? str1 : str2;
8         string big = str1.Length >= str2.Length ? str1 : str2;
9         int[] evenEdits = new int[small.Length + 1];
10        int[] oddEdits = new int[small.Length + 1];
11        for (int j = 0; j < small.Length + 1; j++) {
12            evenEdits[j] = j;
13        }
14        int[] currentEdits;
15        int[] previousEdits;
16        for (int i = 1; i < big.Length + 1; i++) {
17            if (i % 2 == 1) {
18                currentEdits = oddEdits;
19                previousEdits = evenEdits;
20            } else {
21                currentEdits = evenEdits;
22                previousEdits = oddEdits;
23            }
24            currentEdits[0] = i;
25            for (int j = 1; j < small.Length + 1; j++) {
26                if (big[i - 1] == small[j - 1]) {
27                    currentEdits[j] = previousEdits[j - 1];
28                } else {
29                    currentEdits[j] = 1 + Math.Min(previousEdits[j - 1], Math.Min(
30                        previousEdits[j],
31                        currentEdits[j - 1]));
32                }
33            }
34        }
35    }
36    return big.Length % 2 == 0 ? evenEdits[small.Length] : oddEdits[small.Length];
37 }
38 }
39

```

Solution 1      Solution 2      Solution 3

```
1 public class Program {
2     public static int LevenshteinDistance(string str1, string str2) {
3         // Write your code here.
4         return -1;
5     }
6 }
7
```

**Run or submit code when you're ready.**

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