

Output of the python code in editdistance_complete.py file

Example 1:

sString1 = "kitten"

sString2 = "sitting"

Output from my algorithm:

```
Python 3.6.4 Shell
File Edit Shell Debug Options Window Help
Python 3.6.4 (v3.6.4:d48eceb, Dec 19 2017, 06:54:40) [MSC v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: D:\Masters\Data Mining\Assignments\Submitted Assignments\editdistance_complete.py
Edit Distance Matrix

      | s | i | t | t | i | n | g |
      | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
k | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
i | 2 | 2 | 1 | 2 | 3 | 4 | 5 | 6 |
t | 3 | 3 | 2 | 1 | 2 | 3 | 4 | 5 |
t | 4 | 4 | 3 | 2 | 1 | 2 | 3 | 4 |
e | 5 | 5 | 4 | 3 | 2 | 2 | 3 | 4 |
n | 6 | 6 | 5 | 4 | 3 | 3 | 2 | 3 |

Edit distance is 3
The sequence of edits:
Step 1 : k
Step 2 : e
Step 3 : g
>>>
```

Example 2:

sString1 = "GAMBOL"

sString2 = "GUMBO"

Output from my algorithm:

```
Python 3.6.4 Shell
File Edit Shell Debug Options Window Help
Python 3.6.4 (v3.6.4:d48eceb, Dec 19 2017, 06:54:40) [MSC v.1900 64 bit (AMD64)] on win32
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>>>
RESTART: D:\Masters\Data Mining\Assignments\Submitted Assignments\editdistance_complete.py
Edit Distance Matrix

      | G | U | M | B | O
      | 0 | 1 | 2 | 3 | 4 | 5
G | 1 | 0 | 1 | 2 | 3 | 4
A | 2 | 1 | 1 | 2 | 3 | 4
M | 3 | 2 | 2 | 1 | 2 | 3
B | 4 | 3 | 3 | 2 | 1 | 2
O | 5 | 4 | 4 | 3 | 2 | 1
L | 6 | 5 | 5 | 4 | 3 | 2

Edit distance is 2
The sequence of edits:
Step 1 : U
Step 2 : L
>>> |
```

Explanation for Output:

I have observed the Edit Distance matrix which calculates the Edit distance (number of edit operations that transforms one string to other).

I have assumed (while coding) that we are transforming the smaller (of two) string to the larger one. So, the I have observed the characters, on which edit operations must be performed to achieve the required transformation, as output.

The output really makes sense because it exactly points out the characters that need to be edited to transform the smaller string to larger one and also accurately determines the number of operations (Edit Distance) required to do so.