

Data Mining; Assignemt 2

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Example 1: "kitten" \longrightarrow "sitting"

Output: 3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|----------|
| | | 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 | <u>3</u> |

Example 2: "GUMBO" \longrightarrow "GAMBOL"

Output: 2

| | | | | | | | |
|---|---|---|---|---|---|---|----------|
| | | G | A | M | B | O | L |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| G | 1 | 0 | 1 | 2 | 3 | 4 | 5 |
| U | 2 | 1 | 1 | 2 | 3 | 4 | 5 |
| M | 3 | 2 | 2 | 1 | 2 | 3 | 4 |
| B | 4 | 3 | 3 | 2 | 1 | 2 | 3 |
| O | 5 | 4 | 4 | 3 | 2 | 1 | <u>2</u> |

Yes the output result makes sense. I realized that the cell we are trying to compute is almost always the min of the three closest (computed) cells.