**Edit Distance Matrices**

1. Levenshtein & Lavenstaein

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ⊗ | ⊗ | **L** | **E** | **V** | **E** | **N** | **S** | **H** | **T** | **E** | **I** | **N** |
| ⊗ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| **L** | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **A** | 2 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **V** | 3 | 2 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **E** | 4 | 3 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **N** | 5 | 4 | 3 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **S** | 6 | 5 | 4 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 |
| **T** | 7 | 6 | 5 | 5 | 4 | 3 | 2 | 2 | 2 | 3 | 4 | 5 |
| **A** | 8 | 7 | 6 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 4 | 5 |
| **E** | 9 | 8 | 7 | 7 | 6 | 5 | 4 | 4 | 4 | 3 | 4 | 5 |
| **I** | 10 | 9 | 8 | 8 | 7 | 6 | 5 | 5 | 5 | 4 | 3 | 4 |
| **N** | 11 | 10 | 9 | 9 | 8 | 7 | 6 | 6 | 6 | 5 | 4 | 3 |

Minimum Edit Distance: 3

1. TryHackMe & TriHackingMe

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ⊗ | ⊗ | **T** | **r** | **y** | **H** | **a** | **c** | **k** | **M** | **e** |
| ⊗ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **T** | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **r** | 2 | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **i** | 3 | 2 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **H** | 4 | 3 | 2 | 2 | 1 | 2 | 3 | 4 | 5 | 6 |
| **a** | 5 | 4 | 3 | 3 | 2 | 1 | 2 | 3 | 4 | 5 |
| **c** | 6 | 5 | 4 | 4 | 3 | 2 | 1 | 2 | 3 | 4 |
| **k** | 7 | 6 | 5 | 5 | 4 | 3 | 2 | 1 | 2 | 3 |
| **i** | 8 | 7 | 6 | 6 | 5 | 4 | 3 | 2 | 2 | 3 |
| **n** | 9 | 8 | 7 | 7 | 6 | 5 | 4 | 3 | 3 | 3 |
| **g** | 10 | 9 | 8 | 8 | 7 | 6 | 5 | 4 | 4 | 4 |
| **M** | 11 | 10 | 9 | 9 | 8 | 7 | 6 | 5 | 4 | 5 |
| **e** | 12 | 11 | 10 | 10 | 9 | 8 | 7 | 6 | 5 | 4 |

Minimum Edit Distance: 4

1. Optimization & Progressive

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ⊗ | ⊗ | **O** | **p** | **t** | **i** | **m** | **i** | **z** | **a** | **t** | **i** | **o** | **n** |
| ⊗ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| **P** | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| **r** | 2 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| **o** | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 10 | 11 |
| **g** | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 11 |
| **r** | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| **e** | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| **s** | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 9 | 10 | 11 | 12 |
| **s** | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 10 | 11 | 12 |
| **i** | 9 | 9 | 9 | 9 | 8 | 9 | 8 | 9 | 9 | 9 | 9 | 10 | 11 |
| **v** | 10 | 10 | 10 | 10 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 11 |
| **e** | 11 | 11 | 11 | 11 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 |

Minimum Edit Distance: 11

1. This is easy & This is easy

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ⊗ | ⊗ | **T** | **h** | **i** | **s** |  | **i** | **s** |  | **e** | **a** | **s** | **y** |
| ⊗ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| **T** | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| **h** | 2 | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **i** | 3 | 2 | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **s** | 4 | 3 | 2 | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|  | 5 | 4 | 3 | 2 | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **i** | 6 | 5 | 4 | 3 | 2 | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| **s** | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | 1 | 2 | 3 | 4 | 5 |
|  | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | 1 | 2 | 3 | 4 |
| **e** | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | 1 | 2 | 3 |
| **a** | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | 1 | 2 |
| **s** | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | 1 |
| **y** | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |

No Edit distance since the words are same: 0