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**Repository**

*<https://github.com/FaqihAzh/nlp-task/tree/main/week-5>*

**Pertanyaan**

1. Hitunglah jarak dari kata **komputer** dan **blunder** dengan menggunakan metode *Levenshtein Distance*!

**Jawab:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **R** | 8 | 9 | 10 | 9 | 10 | 11 | 10 | 9 |
| **E** | 7 | 8 | 9 | 8 | 9 | 10 | 9 | 10 |
| **T** | 6 | 7 | 8 | 7 | 8 | 9 | 10 | 11 |
| **U** | 5 | 6 | 7 | 6 | 7 | 8 | 9 | 10 |
| **P** | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| **M** | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **O** | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **K** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **#** | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | **#** | **B** | **L** | **U** | **N** | **D** | **E** | **R** |

Operasi yang dilakukan yaitu sebagai berikut:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DK** | **DO** | **SM-B** | **SP-L** |  | **IN** | **ST-D** |  |  |
| K | O | M | P | U | \* | T | E | R |
| ⏐ | ⏐ | ⏐ | ⏐ | ⏐ | ⏐ | ⏐ | ⏐ | ⏐ |
| \* | \* | B | L | U | N | D | E | R |

Jadi, Nilai *Minimum Edit Distance* (MED) antara kata **komputer** dan **blunder** adalah **9**, dengan detail operasi sebagai berikut:

|  |  |  |  |
| --- | --- | --- | --- |
| Delete “K” | → | 1 | |
| Delete “O” | → | 1 | |
| Substitute “M” dengan ”B” | → | 2 | |
| Substitute “P” dengan ”L” | → | 2 | |
| Insert “N” | → | 1 | |
| Substitute “T” dengan ”D” | → | 2 | + |
|  |  | **9** | |

1. Hitunglah jarak dari kata **advokasi** dan **alpukat** dengan menggunakan metode *Levenshtein Distance*!

**Jawab:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **I** | 8 | 7 | 8 | 9 | 10 | 9 | 8 | 9 |
| **S** | 7 | 6 | 7 | 8 | 9 | 8 | 7 | 8 |
| **A** | 6 | 5 | 6 | 7 | 8 | 7 | 6 | 7 |
| **K** | 5 | 4 | 5 | 6 | 7 | 6 | 7 | 8 |
| **O** | 4 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **V** | 3 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **D** | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **A** | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| **#** | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | **#** | **A** | **L** | **P** | **U** | **K** | **A** | **T** |

Operasi yang dilakukan yaitu sebagai berikut:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **SD-L** | **SV-L** | **SO-U** |  |  | **SS-T** | **DI** |
| A | D | V | O | K | A | S | I |
| ⏐ | ⏐ | ⏐ | ⏐ | ⏐ | ⏐ | ⏐ | ⏐ |
| A | L | P | U | K | A | T | \* |

Jadi, Nilai *Minimum Edit Distance* (MED) antara kata **advokasi** dan **alpukat** adalah **9**, dengan detail operasi sebagai berikut:

|  |  |  |  |
| --- | --- | --- | --- |
| Substitute “D” dengan ”L” | → | 2 | |
| Substitute “V” dengan ”P” | → | 2 | |
| Substitute “O” dengan ”U” | → | 2 | |
| Substitute “S” dengan ”T” | → | 2 | |
| Delete ”I” | → | 1 | + |
|  |  | **9** | |