**LAPORAN TUGAS KELOMPOK**

**CODING & MACHINE LEARNING**



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Data

D1 : Aku suka sekali Doraemon. Makan roti dorayaki, kesukaan doraemon adalah favoritku. Selain dorayaki, sushi juga makanan kesukaanku.

D2 : Makanan paling populer di Jepang adalah Sushi. Sushi terbuat dari nasi dan ikan salmon. Rasa sushi beraneka ragam. Siapapun yang pernah ke Jepang pasti menyukai sushi.

D3 : Sushi merupakan makanan khas Jepang. Sushi yang paling enak adalah ikan salmon dan onigiri. Selain sushi, ramen juga favorit orang Jepang

D4 : Di Jepang makanan berkuah paling diminati oleh penduduk Jepang. Selain makanan, anime juga merupakan salah satu film yang digemari. Banyak orang di Jepang menyukai film anime.

Data Hasil Preprocessing

D1 : doraemon, makan, roti, dorayaki, suka

D2 : makan, jepang, sushi, nasi, ikan, salmon, aneka, ragam, suka

D3 : sushi, makan, jepang, ikan, salmon, onigiri, ramen, orang

D4 : jepang, makan, kuah, penduduk, anime, film, gemari, orang, suka

Binary Term-Weighting

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Kata** | **D1** | **D2** | **D3** | **D4** |
| doraemon | 1 | 0 | 0 | 0 |
| makan | 1 | 1 | 1 | 1 |
| roti | 1 | 0 | 0 | 0 |
| dorayaki | 1 | 0 | 0 | 0 |
| suka | 1 | 1 | 0 | 0 |
| favorit | 1 | 0 | 1 | 0 |
| jepang | 0 | 1 | 1 | 1 |
| sushi | 1 | 1 | 1 | 0 |
| nasi | 0 | 1 | 0 | 0 |
| ikan | 0 | 1 | 0 | 0 |
| salmon | 0 | 1 | 1 | 0 |
| aneka | 0 | 1 | 0 | 0 |
| ragam | 0 | 1 | 0 | 0 |
| onigiri | 0 | 0 | 1 | 0 |
| ramen | 0 | 0 | 1 | 0 |
| kuah | 0 | 0 | 0 | 1 |
| minat | 0 | 0 | 0 | 1 |
| penduduk | 0 | 0 | 0 | 1 |
| anime | 0 | 0 | 0 | 1 |
| film | 0 | 0 | 0 | 1 |
| gemar | 0 | 0 | 0 | 1 |
| orang | 0 | 0 | 1 | 0 |

Raw Term Frequency Weighting

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Kata** | **D1** | **D2** | **D3** | **D4** |
| doraemon | 2 | 0 | 0 | 0 |
| makan | 2 | 1 | 1 | 2 |
| roti | 1 | 0 | 0 | 0 |
| dorayaki | 2 | 0 | 0 | 0 |
| suka | 3 | 1 | 0 | 1 |
| favorit | 1 | 0 | 1 | 0 |
| jepang | 0 | 2 | 2 | 3 |
| sushi | 1 | 4 | 3 | 0 |
| nasi | 0 | 1 | 0 | 0 |
| ikan | 0 | 1 | 1 | 0 |
| salmon | 0 | 1 | 1 | 0 |
| aneka | 0 | 1 | 0 | 0 |
| ragam | 0 | 1 | 0 | 0 |
| onigiri | 0 | 0 | 1 | 0 |
| ramen | 0 | 0 | 1 | 0 |
| kuah | 0 | 0 | 0 | 1 |
| minat | 0 | 0 | 0 | 1 |
| penduduk | 0 | 0 | 0 | 1 |
| anime | 0 | 0 | 0 | 2 |
| film | 0 | 0 | 0 | 2 |
| gemar | 0 | 0 | 0 | 1 |
| orang | 0 | 0 | 1 | 0 |

Log Frequency Weighting

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Kata** | **D1** | **D2** | **D3** | **D4** |
| doraemon | 1.301029996 | 0 | 0 | 0 |
| makan | 1.301029996 | 1 | 1 | 1.301029996 |
| roti | 1 | 0 | 0 | 0 |
| dorayaki | 1.301029996 | 0 | 0 | 0 |
| suka | 1.477121255 | 1 | 0 | 1 |
| favorit | 1 | 0 | 1 | 0 |
| jepang | 0 | 1.301029996 | 1.301029996 | 1.477121255 |
| sushi | 1 | 1.602059991 | 1.477121255 | 0 |
| nasi | 0 | 1 | 0 | 0 |
| ikan | 0 | 1 | 1 | 0 |
| salmon | 0 | 1 | 1 | 0 |
| aneka | 0 | 1 | 0 | 0 |
| ragam | 0 | 1 | 0 | 0 |
| onigiri | 0 | 0 | 1 | 0 |
| ramen | 0 | 0 | 1 | 0 |
| kuah | 0 | 0 | 0 | 1 |
| minat | 0 | 0 | 0 | 1 |
| penduduk | 0 | 0 | 0 | 1 |
| anime | 0 | 0 | 0 | 1.301029996 |
| film | 0 | 0 | 0 | 1.301029996 |
| gemar | 0 | 0 | 0 | 1 |
| orang | 0 | 0 | 1 | 0 |

Document Frequency

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Kata** | **D1** | **D2** | **D3** | **D4** | **df** |
| doraemon | 1.301029996 | 0 | 0 | 0 | 1 |
| makan | 1.301029996 | 1 | 1 | 1.301029996 | 4 |
| roti | 1 | 0 | 0 | 0 | 1 |
| dorayaki | 1.301029996 | 0 | 0 | 0 | 1 |
| suka | 1.477121255 | 1 | 0 | 1 | 3 |
| favorit | 1 | 0 | 1 | 0 | 2 |
| jepang | 0 | 1.301029996 | 1.301029996 | 1.477121255 | 3 |
| sushi | 1 | 1.602059991 | 1.477121255 | 0 | 3 |
| nasi | 0 | 1 | 0 | 0 | 1 |
| ikan | 0 | 1 | 1 | 0 | 2 |
| salmon | 0 | 1 | 1 | 0 | 2 |
| aneka | 0 | 1 | 0 | 0 | 1 |
| ragam | 0 | 1 | 0 | 0 | 1 |
| onigiri | 0 | 0 | 1 | 0 | 1 |
| ramen | 0 | 0 | 1 | 0 | 1 |
| kuah | 0 | 0 | 0 | 1 | 1 |
| minat | 0 | 0 | 0 | 1 | 1 |
| penduduk | 0 | 0 | 0 | 1 | 1 |
| anime | 0 | 0 | 0 | 1.301029996 | 1 |
| film | 0 | 0 | 0 | 1.301029996 | 1 |
| gemar | 0 | 0 | 0 | 1 | 1 |
| orang | 0 | 0 | 1 | 0 | 1 |

Invers Document Frequency

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Kata** | **D1** | **D2** | **D3** | **D4** | **df** | **idf** |
| doraemon | 1.301029996 | 0 | 0 | 0 | 1 | 0.602059991 |
| makan | 1.301029996 | 1 | 1 | 1.301029996 | 4 | 0 |
| roti | 1 | 0 | 0 | 0 | 1 | 0.602059991 |
| dorayaki | 1.301029996 | 0 | 0 | 0 | 1 | 0.602059991 |
| suka | 1.477121255 | 1 | 0 | 1 | 3 | 0.124938737 |
| favorit | 1 | 0 | 1 | 0 | 2 | 0.301029996 |
| jepang | 0 | 1.301029996 | 1.301029996 | 1.477121255 | 3 | 0.124938737 |
| sushi | 1 | 1.602059991 | 1.477121255 | 0 | 3 | 0.124938737 |
| nasi | 0 | 1 | 0 | 0 | 1 | 0.602059991 |
| ikan | 0 | 1 | 1 | 0 | 2 | 0.301029996 |
| salmon | 0 | 1 | 1 | 0 | 2 | 0.301029996 |
| aneka | 0 | 1 | 0 | 0 | 1 | 0.602059991 |
| ragam | 0 | 1 | 0 | 0 | 1 | 0.602059991 |
| onigiri | 0 | 0 | 1 | 0 | 1 | 0.602059991 |
| ramen | 0 | 0 | 1 | 0 | 1 | 0.602059991 |
| kuah | 0 | 0 | 0 | 1 | 1 | 0.602059991 |
| minat | 0 | 0 | 0 | 1 | 1 | 0.602059991 |
| penduduk | 0 | 0 | 0 | 1 | 1 | 0.602059991 |
| anime | 0 | 0 | 0 | 1.301029996 | 1 | 0.602059991 |
| film | 0 | 0 | 0 | 1.301029996 | 1 | 0.602059991 |
| gemar | 0 | 0 | 0 | 1 | 1 | 0.602059991 |
| orang | 0 | 0 | 1 | 0 | 1 | 0.602059991 |

Tf-Idf Weighting

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Kata** | **D1** | **D2** | **D3** | **D4** | **df** | **idf** |
| doraemon | 0.783298108 | 0 | 0 | 0 | 1 | 0.602059991 |
| makan | 0 | 0 | 0 | 0 | 4 | 0 |
| roti | 0.602059991 | 0 | 0 | 0 | 1 | 0.602059991 |
| dorayaki | 0.783298108 | 0 | 0 | 0 | 1 | 0.602059991 |
| suka | 0.184549663 | 0.124938737 | 0 | 0.124938737 | 3 | 0.124938737 |
| favorit | 0.301029996 | 0 | 0.301029996 | 0 | 2 | 0.301029996 |
| jepang | 0 | 0.162549044 | 0.162549044 | 0.184549663 | 3 | 0.124938737 |
| sushi | 0.124938737 | 0.200159351 | 0.184549663 | 0 | 3 | 0.124938737 |
| nasi | 0 | 0.602059991 | 0 | 0 | 1 | 0.602059991 |
| ikan | 0 | 0.301029996 | 0.301029996 | 0 | 2 | 0.301029996 |
| salmon | 0 | 0.301029996 | 0.301029996 | 0 | 2 | 0.301029996 |
| aneka | 0 | 0.602059991 | 0 | 0 | 1 | 0.602059991 |
| ragam | 0 | 0.602059991 | 0 | 0 | 1 | 0.602059991 |
| onigiri | 0 | 0 | 0.602059991 | 0 | 1 | 0.602059991 |
| ramen | 0 | 0 | 0.602059991 | 0 | 1 | 0.602059991 |
| kuah | 0 | 0 | 0 | 0.602059991 | 1 | 0.602059991 |
| minat | 0 | 0 | 0 | 0.602059991 | 1 | 0.602059991 |
| penduduk | 0 | 0 | 0 | 0.602059991 | 1 | 0.602059991 |
| anime | 0 | 0 | 0 | 0.783298108 | 1 | 0.602059991 |
| film | 0 | 0 | 0 | 0.783298108 | 1 | 0.602059991 |
| gemar | 0 | 0 | 0 | 0.602059991 | 1 | 0.602059991 |
| orang | 0 | 0 | 0.602059991 | 0 | 1 | 0.602059991 |