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MatKul: Penambangan Data

| No.   | Y1     | Y2  | 3.4              | 8+5, 1100    |    |            | 194 | 100      |
|-------|--------|-----|------------------|--------------|----|------------|-----|----------|
| 1.    | 2      | 2   |                  | 2            | => | 7.         | 7.4 | 1.       |
| 2.    | 3      | 2   | 7.5              | 1+2 = (sy) ? | 1  | 5-7        |     | 43       |
| 3.    | 1      | 1   |                  | 1            |    |            |     |          |
| 4.    | 3      | 1   |                  |              |    |            |     |          |
| 5.    | 1.5    | 0,5 |                  | 1            |    |            |     | 2 4 7 0  |
| ren - | priset | 9 2 | Cluster 1 Clustr | 1090100      |    | ( needlest | 3)  | ا دستر د |

8/1.

|    |      |        | Cluster       | 2               | Cen            | troid             | m. chi. |       |               | 7, 14, |       |
|----|------|--------|---------------|-----------------|----------------|-------------------|---------|-------|---------------|--------|-------|
| Y2 | 1.1  | Prp.   | Ciuster       | YI              | Y2             | Assignment        | 3-701)+ | -124  | 2.) Ja =      | 13,28. |       |
| 12 | 1,11 | MHIH.  | K1            | 0               | 1              | 1                 |         |       |               |        |       |
| 2  |      |        | K2            | 1               | O              | 0                 |         | 2(82) | 7821_         | ustyl  | 6     |
|    | 2    | 2 11.1 | 2 11.1 7 11.1 | 2 11,1 mrit. K1 | 2 // MHIH K1 O | 2 11.1 MHH K1 0 1 | 2 1/1   | 2 1/1 | 2 // X1 O 1 1 | 2 1/1  | 2 1/1 |

. K=2

3000

· Calculate distance (Ex. Eucidean) - 2.1

d(K1,K1) = \( (2-2)^2 + (2-2)^2 = 0 d (K1, K2) = 1 (2-3)2 + (2-2)2 = 1

| • | K | = | 2 |  |
|---|---|---|---|--|
| _ |   |   |   |  |

| · Cakulate distance (Ex. Eucidean)       | Dataset |           | Euclida | ean        |  |
|--|---------|-----------|---------|------------|--|
| d(K1, 13) = \( (2-1)^2 + (2-1)^2 = 1,414 |         | Cluster 1 |         | Assignment |  |
| d(x2, n3) = N(3-1)2 + (2-1)2 = 2,236     | 3       | 1,414     | 2,236   | 1          |  |

## a Update cluster 2 (K2)

| Cluster | Y1 | Y2  | X2 (Y1) 3+1 2       |
|---------|----|-----|---------------------|
| K1      | 2  | 2   | ¢ 2                 |
| K2      | 2  | 1,5 | K2 (Y2) = 1+2 = 1,5 |
|         |    |     | 2                   |

- MINIST

· K= 2

| Cakulate distance (Ex. Eucidean)              | -       | mortionic ? | Eucli dean | nul II : Emell |
|---|---------|-------------|------------|----------------|
| d(K1, n4) = 1 (2-3)2 + (2-1)2 = 1,414         | Dataset | Cluster 1   | Cluster 2  | Assignment     |
| d (K2, N4) = \$\int (2-3)2 + (1,5-1)2 = 1,118 | 3       | 1,414 81    | 2,236      | IONE DINE      |
|   | _ 4     | 1,414       | 1,118      | 2              |

D Undate Cluster 2 (K2)

| Cluster    | 41  | 42  | K1 (Y1) = 2+3 = 2,5 | N'Z | 17 | .00  |
|------------|-----|-----|---------------------|-----|----|------|
| <b>X</b> 1 | 2,5 | 1,5 | (= l                | 1   | 7  | .1   |
| K2         | 2   | 1,5 | K, (Y2) = 2+1 1,5   |     | 0  | 2    |
|            |     |     | 2                   |     | 1  | 1 .6 |

| • X = 2                                      | Dahaal  |           | 2.0       | E.: .5      |
|--|---------|-----------|-----------|-------------|
| · Calculate distance (Ex. Eucidean)          | Dataset | Cluster 1 | Cluster 2 | Assignment  |
| d (x1, 95) = 1(2,5-1,5)2+(1,5-0,5)2 = 1,414  | 3       | 1,414     | 2,234     | no Quint to |
| d (K2, N5) = 0 (2-1,5)2 + (1,5-0,5)2 = 1,118 | Y 44    | 1,414     | 1,118     | 2 19:21     |
|  | 1 50    | 1,414     | 1,118     | 2 3         |

1 Update Cluster 2(K2)

| was a transfer of the state of | 11) 2,5 + 1,5 2               | K1(\ | 42  | <b>V1</b> | Cluster   |
|---|-------------------------------|------|-----|-----------|-----------|
| 1 = 1/4 e   | 2                             | -    | 1   | 2         | <b>K1</b> |
| ecalculate distance   | Y2) = 1,5 +0,5 magb 1 m3 .23) | K1(  | 1,5 | 2         | K2        |

# Final

| No | Y1  | Y2  | Assignment |                 |  |
|----|-----|-----|------------|-----------------|--|
| 1  | 2   | 2   | 1          |                 | £ = % o                                |
| 2  | 3   | 2   | 0          | nosbiscut l     | Cakulate distance (Ex. Euribern)       |
| 3  | 1   | 1   | 2 '        | www.Sandio      | FIF. 1 - "11-5 J+" (1-5) To = 100,0000 |
| 4  | 3   | 1   | 2          | 3 1,414 2,835 [ | d(x2, 08) = a (8-1) + (2-1) + . 23.    |
| 5  | 1,5 | 0,5 | 2          |                 |  |

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