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LAMPIRAN

Lampiran 1 : Perhitungan Jarak *Euclidean* Metode AHC

1. Perhitungan d (Nias, y)

$$\begin{aligned}d(\text{Nias}, \text{Nias}) &= \sqrt{(2,31 - 2,31)^2 + (15,1 - 15,1)^2 + (1,95 - 1,95)^2 + (0,4 - 0,4)^2} \\&= 0\end{aligned}$$

$$\begin{aligned}d(\text{Nias}, \text{Mandailing Natal}) &= \sqrt{(2,31 - 7,54)^2 + (15,1 - 8,86)^2 + (1,95 - 1,48)^2 +} \\&\quad \sqrt{(0,4 - 0,44)^2} \\&= 8,10\end{aligned}$$

$$\begin{aligned}d(\text{Nias}, \text{Tapanuli Selatan}) &= \sqrt{(2,31 - 3,49)^2 + (15,1 - 7,01)^2 + (1,95 - 0,92)^2 +} \\&\quad \sqrt{(0,4 - 0,18)^2} \\&= 8,24\end{aligned}$$

$$\begin{aligned}d(\text{Nias}, \text{Tapanuli Tengah}) &= \sqrt{(2,31 - 7,81)^2 + (15,1 - 11,5)^2 + (1,95 - 1,58)^2 +} \\&\quad \sqrt{(0,4 - 0,3)^2} \\&= 6,58\end{aligned}$$

$$\begin{aligned}d(\text{Nias}, \text{Tapanuli Utara}) &= \sqrt{(2,31 - 1,03)^2 + (15,1 - 8,54)^2 + (1,95 - 0,94)^2 +} \\&\quad \sqrt{(0,4 - 0,18)^2} \\&= 6,76\end{aligned}$$

$$\begin{aligned}d(\text{Nias}, \text{Toba}) &= \sqrt{(2,31 - 1,3)^2 + (15,1 - 8,04)^2 + (1,95 - 1,02)^2 + (0,4 - 0,18)^2} \\&= 7,20\end{aligned}$$

$$\begin{aligned}d(\text{Nias}, \text{Labuhanbatu}) &= \sqrt{(2,31 - 5,99)^2 + (15,1 - 7,99)^2 + (1,95 - 1,4)^2 +} \\&\quad \sqrt{(0,4 - 0,37)^2} \\&= 8,02\end{aligned}$$

$$\begin{aligned} d(\text{Nias, Asahan}) &= \sqrt{(2,31 - 6,12)^2 + (15,1 - 8,21)^2 + (1,95 - 0,77)^2 + (0,4 - 0,13)^2} \\ &= 7,97 \end{aligned}$$

$$\begin{aligned} d(\text{Nias, Simalungun}) &= \sqrt{(2,31 - 5,35)^2 + (15,1 - 7,87)^2 + (1,95 - 0,99)^2 +} \\ &\quad \sqrt{(0,4 - 0,21)^2} \\ &= 7,90 \end{aligned}$$

$$\begin{aligned} d(\text{Nias, Dairi}) &= \sqrt{(2,31 - 1,23)^2 + (15,1 - 7,47)^2 + (1,95 - 0,93)^2 + (0,4 - 0,17)^2} \\ &= 7,78 \end{aligned}$$

$$\begin{aligned} d(\text{Nias, Karo}) &= \sqrt{(2,31 - 2,63)^2 + (15,1 - 7,98)^2 + (1,95 - 1,17)^2 + (0,4 - 0,29)^2} \\ &= 7,17 \end{aligned}$$

$$\begin{aligned} d(\text{Nias, Deli Serdang}) &= \sqrt{(2,31 - 8,62)^2 + (15,1 - 3,44)^2 + (1,95 - 0,34)^2 +} \\ &\quad \sqrt{(0,4 - 0,07)^2} \\ &= 13,36 \end{aligned}$$

$$\begin{aligned} d(\text{Nias, Langkat}) &= \sqrt{(2,31 - 6,33)^2 + (15,1 - 9,23)^2 + (1,95 - 2,22)^2 + (0,4 - 0,79)^2} \\ &= 7,13 \end{aligned}$$

$$\begin{aligned} d(\text{Nias, Nias Selatan}) &= \sqrt{(2,31 - 3,48)^2 + (15,1 - 16,39)^2 + (1,95 - 3,04)^2 +} \\ &\quad \sqrt{(0,4 - 0,84)^2} \\ &= 2,10 \end{aligned}$$

$$\begin{aligned} d(\text{Nias, Humbang Hasundutan}) &= \sqrt{(2,31 - 0,84)^2 + (15,1 - 8,69)^2 + (1,95 - 0,99)^2 +} \\ &\quad \sqrt{(0,4 - 0,19)^2} \\ &= 6,65 \end{aligned}$$

$$\begin{aligned}
 d(\text{Nias, Pakpak Barat}) &= \sqrt{(2,31 - 0,45)^2 + (15,1 - 7,54)^2 + (1,95 - 0,49)^2 +} \\
 &\quad \sqrt{(0,4 - 0,07)^2} \\
 &= 7,93
 \end{aligned}$$

$$\begin{aligned}
 d(\text{Nias, Samosir}) &= \sqrt{(2,31 - 1,03)^2 + (15,1 - 11,66)^2 + (1,95 - 1,87)^2 + (0,4 - 0,49)^2} \\
 &= 3,67
 \end{aligned}$$

$$\begin{aligned}
 d(\text{Nias, Serdang Bedagai}) &= \sqrt{(2,31 - 4,97)^2 + (15,1 - 7,44)^2 + (1,95 - 0,89)^2 +} \\
 &\quad \sqrt{(0,4 - 0,21)^2} \\
 &= 8,18
 \end{aligned}$$

$$\begin{aligned}
 d(\text{Nias, Batu Bara}) &= \sqrt{(2,31 - 5,88)^2 + (15,1 - 11,38)^2 + (1,95 - 1,51)^2 + (0,4 - 0,36)^2} \\
 &= 5,17
 \end{aligned}$$

$$\begin{aligned}
 d(\text{Nias, Padang Lawas Utara}) &= \sqrt{(2,31 - 4,42)^2 + (15,1 - 8,79)^2 + (1,95 - 1,14)^2 +} \\
 &\quad \sqrt{(0,4 - 0,24)^2} \\
 &= 6,70
 \end{aligned}$$

$$\begin{aligned}
 d(\text{Nias, Padang Lawas}) &= \sqrt{(2,31 - 5,75)^2 + (15,1 - 7,89)^2 + (1,95 - 1,44)^2 +} \\
 &\quad \sqrt{(0,4 - 0,42)^2} \\
 &= 8
 \end{aligned}$$

$$\begin{aligned}
 d(\text{Nias, Labuhanbatu Selatan}) &= \sqrt{(2,31 - 3,43)^2 + (15,1 - 8,06)^2 + (1,95 - 0,94)^2 +} \\
 &\quad \sqrt{(0,4 - 0,18)^2} \\
 &= 7,20
 \end{aligned}$$

$$\begin{aligned}
 d(\text{Nias, Labuhanbatu Utara}) &= \sqrt{(2,31 - 4,84)^2 + (15,1 - 9,08)^2 + (1,95 - 1,19)^2 +} \\
 &\quad \sqrt{(0,4 - 0,27)^2} \\
 &= 6,58
 \end{aligned}$$

$$\begin{aligned}
d(\text{Nias, Nias Utara}) &= \sqrt{(2,31 - 2,57)^2 + (15,1 - 21,79)^2 + (1,95 - 2,52)^2 +} \\
&\quad \sqrt{(0,4 - 0,59)^2} \\
&= 6,72
\end{aligned}$$

$$\begin{aligned}
d(\text{Nias, Nias Barat}) &= \sqrt{(2,31 - 0,8)^2 + (15,1 - 22,81)^2 + (1,95 - 2,08)^2 +} \\
&\quad \sqrt{(0,4 - 0,34)^2} \\
&= 7,86
\end{aligned}$$

$$\begin{aligned}
d(\text{Nias, Sibolga}) &= \sqrt{(2,31 - 6,79)^2 + (15,1 - 11,42)^2 + (1,95 - 1,49)^2 + (0,4 - 0,29)^2} \\
&= 5,82
\end{aligned}$$

$$\begin{aligned}
d(\text{Nias, Tanjung Balai}) &= \sqrt{(2,31 - 4,47)^2 + (15,1 - 12,21)^2 + (1,95 - 1,34)^2 +} \\
&\quad \sqrt{(0,4 - 0,24)^2} \\
&= 3,66
\end{aligned}$$

$$\begin{aligned}
d(\text{Nias, Pematang Siantar}) &= \sqrt{(2,31 - 8,62)^2 + (15,1 - 7,24)^2 + (1,95 - 1)^2 +} \\
&\quad \sqrt{(0,4 - 0,2)^2} \\
&= 10,13
\end{aligned}$$

$$\begin{aligned}
d(\text{Nias, Tebing Tinggi}) &= \sqrt{(2,31 - 6,24)^2 + (15,1 - 9,49)^2 + (1,95 - 1,49)^2 +} \\
&\quad \sqrt{(0,4 - 0,35)^2} \\
&= 6,87
\end{aligned}$$

$$\begin{aligned}
d(\text{Nias, Sibolga}) &= \sqrt{(2,31 - 8,67)^2 + (15,1 - 8)^2 + (1,95 - 0,92)^2 + (0,4 - 0,19)^2} \\
&= 9,59
\end{aligned}$$

$$\begin{aligned}
d(\text{Nias, Binjai}) &= \sqrt{(2,31 - 6,1)^2 + (15,1 - 4,79)^2 + (1,95 - 0,48)^2 + (0,4 - 0,06)^2} \\
&= 11,09
\end{aligned}$$

$$\begin{aligned}
 d(\text{Nias, Padang Sidempuan}) &= \sqrt{(2,31 - 7,57)^2 + (15,1 - 6,85)^2 + (1,95 - 0,87)^2 +} \\
 &\quad \sqrt{(0,4 - 0,17)^2} \\
 &= 9,85
 \end{aligned}$$

$$\begin{aligned}
 d(\text{Nias, Gunung Sitoli}) &= \sqrt{(2,31 - 3,67)^2 + (15,1 - 14,78)^2 + (1,95 - 2,08)^2 +} \\
 &\quad \sqrt{(0,4 - 0,46)^2} \\
 &= 1,40
 \end{aligned}$$

Selanjutnya perhitungan dilakukan dengan cara yang sama hingga selesai.



Lampiran 2: Pengelompokan Menggunakan Mode *Single Linkage*

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Nias} &= \min\{6, 76; 6, 65\} \\ &= 6,65\end{aligned}$$

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Mandailing Natal} &= \min\{6, 46; 6, 64\} \\ &= 6,46\end{aligned}$$

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Tapanuli Selatan} &= \min\{2, 90; 3, 14\} \\ &= 2,90\end{aligned}$$

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Tapanuli Tengah} &= \min\{7, 43; 7, 54\} \\ &= 7,43\end{aligned}$$

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Tapanuli Utara} &= \min\{0; 0, 25\} \\ &= 0\end{aligned}$$

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Toba} &= \min\{0, 57; 0, 80\} \\ &= 0,57\end{aligned}$$

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Labuhanbatu} &= \min\{5, 02; 5, 22\} \\ &= 5,02\end{aligned}$$

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Asahan} &= \min\{5, 10; 5, 31\} \\ &= 5,10\end{aligned}$$

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Simalungun} &= \min\{4, 37; 4, 58\} \\ &= 4,37\end{aligned}$$

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Dairi} &= \min\{1, 09; 1, 28\} \\ &= 1,09\end{aligned}$$

$$\begin{aligned}d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Karo} &= \min\{1, 71; 1, 94\} \\ &= 1,71\end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Deli Serdang} &= \min\{9, 16; 9, 41\} \\ &= 9,16 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Langkat} &= \min\{5, 53; 5, 68\} \\ &= 5,53 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Nias Selatan} &= \min\{8, 51; 8, 42\} \\ &= 8,42 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Humbang Hasundutan} &= \min\{0, 25; 0\} \\ &= 0 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Pakpak Barat} &= \min\{1, 25; 1, 32\} \\ &= 1,25 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Samosir} &= \min\{3, 27; 3, 12\} \\ &= 3,12 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Serdang Bedagai} &= \min\{4, 09; 4, 32\} \\ &= 4,09 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Batu Bara} &= \min\{5, 65; 5, 74\} \\ &= 5,65 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Padang Lawas Utara} &= \min\{5, 65; 5, 74\} \\ &= 3,41 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Padang Lawas} &= \min\{4, 8 : 5\} \\ &= 4,8 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Labuhanbatu Selatan} &= \min\{2, 45; 2, 67\} \\ &= 2,45 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Labuhanbatu Utara} &= \min\{3, 86; 4, 02\} \\ &= 3,86 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Nias Utara} &= \min\{13, 44; 13, 31\} \\ &= 13,31 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Nias Barat} &= \min\{14, 32; 14, 16\} \\ &= 14,16 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Sibolga} &= \min\{6, 46; 6, 57\} \\ &= 6,46 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Tanjung Balai} &= \min\{5, 05; 5, 07\} \\ &= 5,05 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Pematang Siantar} &= \min\{7, 7; 7, 91\} \\ &= 7,7 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Tebing Tinggi} &= \min\{5, 33; 5, 48\} \\ &= 5,33 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Medan} &= \min\{7, 66; 7, 86\} \\ &= 7,66 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Binjai} &= \min\{6, 32; 6, 57\} \\ &= 6,32 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Padang Sidempuan} &= \min\{6, 76; 6, 98\} \\ &= 6,76 \end{aligned}$$

$$\begin{aligned} d(\text{Tapanuli Utara, Humbang Hasundutan}) \text{ Gunung Sitoli} &= \min\{6, 88; 6, 81\} \\ &= 6,81 \end{aligned}$$

Perhitungan dilakukan hingga jumlah *cluster* yang terbentuk sebanyak 3 *cluster*.

Lampiran 3 : Perhitungan Metode *K-Means*

Iterasi 1

$$\begin{aligned}d(x_1, c_1) &= \sqrt{((2,31 - 1,3)^2 + (15,1 - 8,04)^2 + (1,95 - 1,02)^2 + (0,4 - 0,18)^2)} \\&= 7,20\end{aligned}$$

$$\begin{aligned}d(x_2, c_1) &= \sqrt{((7,45 - 1,3)^2 + (8,86 - 8,04)^2 + (1,48 - 1,02)^2 + (0,44 - 0,18)^2)} \\&= 6,23\end{aligned}$$

$$\begin{aligned}d(x_3, c_1) &= \sqrt{((3,49 - 1,3)^2 + (7,01 - 8,04)^2 + (0,92 - 1,02)^2 + (0,18 - 0,18)^2)} \\&= 2,42\end{aligned}$$

$$\begin{aligned}d(x_4, c_1) &= \sqrt{((7,81 - 1,3)^2 + (11,5 - 8,04)^2 + (1,58 - 1,02)^2 + (0,3 - 0,18)^2)} \\&= 7,39\end{aligned}$$

$$\begin{aligned}d(x_5, c_1) &= \sqrt{((1,03 - 1,3)^2 + (8,54 - 8,04)^2 + (0,94 - 1,02)^2 + (0,18 - 0,18)^2)} \\&= 0,57\end{aligned}$$

$$\begin{aligned}d(x_6, c_1) &= \sqrt{((1,3 - 1,3)^2 + (8,04 - 8,04)^2 + (1,02 - 1,02)^2 + (0,18 - 0,18)^2)} \\&= 0\end{aligned}$$

$$\begin{aligned}d(x_7, c_1) &= \sqrt{((5,99 - 1,3)^2 + (7,99 - 8,04)^2 + (1,4 - 1,02)^2 + (0,37 - 0,18)^2)} \\&= 4,71\end{aligned}$$

$$\begin{aligned}d(x_8, c_1) &= \sqrt{((6,12 - 1,3)^2 + (8,21 - 8,04)^2 + (0,77 - 1,02)^2 + (0,13 - 0,18)^2)} \\&= 4,83\end{aligned}$$

$$\begin{aligned}d(x_9, c_1) &= \sqrt{((5,35 - 1,3)^2 + (7,87 - 8,04)^2 + (0,99 - 1,02)^2 + (0,21 - 0,18)^2)} \\&= 4,05\end{aligned}$$

$$\begin{aligned}d(x_{10}, c_1) &= \sqrt{((1,23 - 1,3)^2 + (7,47 - 8,04)^2 + (0,93 - 1,02)^2 + (0,17 - 0,18)^2)} \\&= 0,58\end{aligned}$$

$$d(x_{11}, c_1) = \sqrt{((2,63 - 1,3)^2 + (7,98 - 8,04)^2 + (1,17 - 1,02)^2 + (0,29 - 0,18)^2)}$$

$$= 1,34$$

$$d(x_{12}, c_1) = \sqrt{((8,62 - 1,3)^2 + (3,44 - 8,04)^2 + (0,34 - 1,02)^2 + (0,07 - 0,18)^2)}$$

$$= 8,67$$

$$d(x_{13}, c_1) = \sqrt{((6,33 - 1,3)^2 + (9,23 - 8,04)^2 + (2,22 - 1,02)^2 + (0,79 - 0,18)^2)}$$

$$= 5,34$$

$$d(x_{14}, c_1) = \sqrt{((3,48 - 1,3)^2 + (16,39 - 8,04)^2 + (3,04 - 1,02)^2 + (0,84 - 0,18)^2)}$$

$$= 8,89$$

$$d(x_{15}, c_1) = \sqrt{((0,84 - 1,3)^2 + (8,69 - 8,04)^2 + (0,99 - 1,02)^2 + (0,19 - 0,18)^2)}$$

$$= 0,80$$

$$d(x_{16}, c_1) = \sqrt{((0,45 - 1,3)^2 + (7,54 - 8,04)^2 + (0,49 - 1,02)^2 + (0,07 - 0,18)^2)}$$

$$= 1,12$$

$$d(x_{17}, c_1) = \sqrt{((1,03 - 1,3)^2 + (11,66 - 8,04)^2 + (1,87 - 1,02)^2 + (0,49 - 0,18)^2)}$$

$$= 3,74$$

$$d(x_{18}, c_1) = \sqrt{((4,97 - 1,3)^2 + (7,44 - 8,04)^2 + (0,89 - 1,02)^2 + (0,21 - 0,18)^2)}$$

$$= 3,72$$

$$d(x_{19}, c_1) = \sqrt{((5,88 - 1,3)^2 + (11,38 - 8,04)^2 + (1,51 - 1,02)^2 + (0,36 - 0,18)^2)}$$

$$= 5,69$$

$$d(x_{20}, c_1) = \sqrt{((4,42 - 1,3)^2 + (8,79 - 8,04)^2 + (1,14 - 1,02)^2 + (0,24 - 0,18)^2)}$$

$$= 3,21$$

$$d(x_{21}, c_1) = \sqrt{((5,75 - 1,3)^2 + (7,89 - 8,04)^2 + (1,44 - 1,02)^2 + (0,42 - 0,18)^2)}$$

$$= 4,48$$

$$d(x_{22}, c_1) = \sqrt{((3,43 - 1,3)^2 + (8,06 - 8,04)^2 + (0,94 - 1,02)^2 + (0,18 - 0,18)^2)}$$

$$= 2,13$$

$$d(x_{23}, c_1) = \sqrt{((4,84 - 1,3)^2 + (9,08 - 8,04)^2 + (1,19 - 1,02)^2 + (0,27 - 0,18)^2)}$$

$$= 3,69$$

$$d(x_{24}, c_1) = \sqrt{((2,57 - 1,3)^2 + (21,79 - 8,04)^2 + (2,52 - 1,02)^2 + (0,59 - 0,18)^2)}$$

$$= 13,90$$

$$d(x_{25}, c_1) = \sqrt{((0,8 - 1,3)^2 + (22,81 - 8,04)^2 + (2,08 - 1,02)^2 + (0,34 - 0,18)^2)}$$

$$= 14,82$$

$$d(x_{26}, c_1) = \sqrt{((6,79 - 1,3)^2 + (11,42 - 8,04)^2 + (1,49 - 1,02)^2 + (0,29 - 0,18)^2)}$$

$$= 6,47$$

$$d(x_{27}, c_1) = \sqrt{((4,47 - 1,3)^2 + (12,21 - 8,04)^2 + (1,34 - 1,02)^2 + (0,24 - 0,18)^2)}$$

$$= 5,25$$

$$d(x_{28}, c_1) = \sqrt{((8,62 - 1,3)^2 + (7,24 - 8,04)^2 + (1 - 1,02)^2 + (0,2 - 0,18)^2)}$$

$$= 7,36$$

$$d(x_{29}, c_1) = \sqrt{((6,24 - 1,3)^2 + (9,49 - 8,04)^2 + (1,49 - 1,02)^2 + (0,35 - 0,18)^2)}$$

$$= 5,17$$

$$d(x_{30}, c_1) = \sqrt{((8,67 - 1,3)^2 + (8 - 8,04)^2 + (0,92 - 1,02)^2 + (0,19 - 0,18)^2)}$$

$$= 7,37$$

$$d(x_{31}, c_1) = \sqrt{((6,1 - 1,3)^2 + (4,79 - 8,04)^2 + (0,48 - 1,02)^2 + (0,06 - 0,18)^2)}$$

$$= 5,82$$

$$d(x_{32}, c_1) = \sqrt{((7,57 - 1,3)^2 + (6,85 - 8,04)^2 + (0,87 - 1,02)^2 + (0,17 - 0,18)^2)}$$

$$= 7,37$$

$$d(x_{33}, c_1) = \sqrt{((3,67 - 1,3)^2 + (14,78 - 8,04)^2 + (2,08 - 1,02)^2 + (0,46 - 0,18)^2)}$$

$$= 7,23$$

Perhitungan dilakukan hingga $d(x_{33}, c_3)$

C_1	C_2	C_3	JARAK TERDEKAT	CLUSTER
7,20	8,24	6,58	6,58	3
6,23	4,41	2,67	2,67	3
2,42	0,00	6,27	0,00	2
7,39	6,27	0,00	0,00	3
0,57	2,90	7,43	0,57	1
0,00	2,42	7,39	0,00	1
4,71	2,73	3,96	2,73	2
4,83	2,90	3,79	2,90	2
4,05	2,05	4,43	2,05	2
0,58	2,31	7,74	0,58	1
1,34	1,32	6,28	1,32	2
8,67	6,28	8,20	6,28	2
5,34	3,88	2,83	2,83	3
8,89	9,64	6,71	6,71	3
0,80	3,14	7,54	0,80	1
1,12	3,12	8,43	1,12	1
3,74	5,35	6,79	3,74	1
3,72	1,54	5,00	1,54	2
5,69	5,02	1,94	1,94	3
3,21	2,02	4,36	2,02	2
4,48	2,49	4,16	2,49	2
2,13	1,05	5,61	1,05	2
3,69	2,49	3,85	2,49	2
13,90	14,90	11,59	11,59	3
14,82	16,07	13,32	13,32	3
6,47	5,54	1,03	1,03	3
5,25	5,31	3,42	3,42	3
7,36	5,14	4,38	4,38	3
5,17	3,75	2,55	2,55	3
7,37	5,27	3,67	3,67	3
5,82	3,46	7,02	3,46	2
6,38	4,08	4,71	4,08	2
7,23	7,86	5,31	5,31	3

Perhitungan dilakukan hingga iterasi ke-5 dengan cara yang samam seperti iterasi pertama.