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Prodi : Sistem Informasi

## :. Gunakan metode K-Means Cluster Untuk mengelom pokkan data berikut

T	Ho	TI	Y2
1	1	2	2
1	2	3	2
1	3	1	12363
1	4	3	1
	5	1.5	0,5

Jawab:

Initial Centroid K = 2

JIIIIII		0.01	
Cluster	1	Y2	Calculate
Kı	2	2	$d(k_1,k_1) = \sqrt{(2-2)^2 + (2-2)^2} = 0$
K2	3	2	$d(k_1,k_2) = \sqrt{(2-3)^2 + (2-2)^2} =  +0  =  $

Cluster	7	Centro	id
Clusie	7,	Y2	Assignment
kı	0	1	31
K2	10	0	0

K=2	Dataset	31112	Euclidean		
Calculate	Juinset	Cluster 1	cluster 2	世级林林 -	* Assignment
4(K, n3)= \((2-1)^2 + (2-1)^2	3	1,414	2,236	1	100

$$d(k_2,n_3) = \sqrt{(3-1)^2 + (2-1)^2}$$

$$= \sqrt{2^2 + 1} = \sqrt{5}$$

$$= 2/236$$

$$k_2(y_1) = (3+1) = 2$$

$$k_2(y_2) = (1+2) = 1,5$$

Calculate		Euclide	ean	All I
d(k1, n4) = V(2-3)2+(2-1)2	Dataset	cluster 1	cluster 2	Assignment
$=\sqrt{1+1}=\sqrt{2}$	3	1,414	2,236	2
$d(k_2, n_4) = 1/(2-3)^2 + (1.5-1)^2$	1 4	1,414	1,118	2

 $d(k_2,n_4) = \sqrt{(2-3)^2 + (1.5-1)^2}$   $= \sqrt{1+0.25}$  = 1.118

update cluster 2 (Kz)

LCluster	1	Y2 1	$k_1(y_1) = (2+3) = 2,5$ $k_2(y_2) = (2-1) = 0,5$
kı	2,5	0,5	2
L Kz	2	112	ka(42) = (2-1) = 0,5
			7

K= 2

$d(k_1, N_5) = \sqrt{(2/5-1/5)^2 + (0.5-0.5)^2}$	Tors to N	F	uclidean	
= VI = 1	Dataset	Cluster 1	cluster 2	Assignment
$d(k_2, n_5) = \sqrt{(2-115)^2 + (1,5-015)^2}$	3	1,414	2,236	2
= V0/25 + 1	4	1,414	1,118	2
= 1,118	12	1	1,118	2

update cluster 2 (k2)

Cluster	Y	X2	$k_1(y_1) = (215 + 115) = 2$ $k_1(y_2) = (015 + 015) = 0.15$
KI	2	0,5	2
1 Kz	2	115	Ka(yz) = (015+015) - 05
Sastalant	1. 10	Hamle 1	2

· Final

No	TY	Y2	Assignment
1	2	2	Santa Visa adalah
2	3	2	0
3	1	1	2
4	3	1	2
5	115	0,5	2