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$x_1 = (07) \% 3 = 1$ $x_2 = (07) \% 7 = 0$

$y_1 = (07) \% 5 = 2$ $y_2 = (07) \% 9 = 7$

So, Centroid value of A cluster is (1,2)

Centroid value of B cluster is (0,7)

A contains datapoints – (1,1), (1,2), (2,2)

B contains datapoints – (4,4), (4,5), (5,6)

Iteration 1:

Mean of x and y for cluster A will be,

$$x_A = \frac{1+1+2}{3} = 1.33 \qquad y_A = \frac{1+2+2}{3} = 1.667$$

So, new centroid point for cluster A (1.33, 1.667)

Mean of x and y for cluster B will be,

$$x_B = \frac{4+4+5}{3} = 4.33 \qquad y_B = \frac{4+5+6}{3} = 5$$

So, new centroid point for cluster B will be

(4.33, 5)