

Step-3) Cluster1 of V1 = {a1, a2, a4}								
Cluster1 of V2 = {a1, a5, a6}								
Step 4) Recalculate the cluster centers by taking average								
V1= 1/3 [(1,1) + (2,1) +(3,2)]								
1/3(6,4)								
(2,1.3)								
V2 = 1/3 [(2,3) + (4,3) + (5,5)]								
1/3(11,11)								
3.67,3.67								
Step-5) Repeat from step 2 until we get same cluster center or same cluster elements as in previous elements								
Point	Distance from Centroid 1 (2,1.33)	Distance from Centroid 2 (3.67,3.67)	Assigned Cluster					
a1 (1,1)					Step-6) Cluster1 of V1 = {a1, a2, a3,a4}			
					Cluster1 of V12= { a5, a6}			
a2 (2,1)								
					Step 7) Recalculate the cluster centers by taking average			
a3 (2,3)								
					V1= 1/4 [(1,1) + (2,1) +(2,3)+(3,2)]			
a4 (3,2)					1/4(8,7)			
					(2,1.75)			
a5(4,3)								

					$V2 = 1/2 [a5 + a6]$		
					$V2 = 1/2 [(4,3) + (5,5)]$		
					$1/2 (9,8)$		
					(4.5,4)		
					So cluster elements and centers are not same		
					Point	Distance from Centroid 1 (2,1.75)	Distance from Centroid 2 (4.5,4)
					Assigned Cluster		
					a1 (1,1)		
					a2 (2,1)		
					a3 (2,3)		
					a4 (3,2)		
					a5(4,3)		
					since the cluster are not changed		
					Cluster 1 {(1,1) (2,1) (2,3) (3,2)}		
					Cluster 2 { (4,3) (4,5)}		