

Agglomerative hierarchical clustering: calculation example

id	x_1	x_2
d1	2	1
d2	-3	8
d3	0	10
d4	3	2
d5	-2	8
d6	3	0
d7	4	0
d8	-2	6
d9	-3	9
d10	6	1

Step1: Create each datapoint as a single cluster.

	d1	d2	d3	d4	d5	d6	d7	d8	d9	d10
d1										
d2										
d3										
d4										
d5										
d6										
d7										
d8										
d9										
d10										

Step3: Repeat Step2 until only one cluster left.

Step2 (ครั้งที่1): Take 2 closet datapoints or clusters and merge them to form one cluster.

Apply single linkage

Step2 (ครั้งที่2): Take 2 closet datapoints or clusters and merge them to form one cluster.

Apply single linkage

Step2 (ครั้งที่3): Take 2 closet datapoints or clusters and merge them to form one cluster.

Apply single linkage

Step2 (ครั้งที่4): Take 2 closet datapoints or clusters and merge them to form one cluster.

Apply single linkage

Step2 (ครั้งที่5): Take 2 closet datapoints or clusters and merge them to form one cluster.

Apply single linkage

Step2 (ครั้งที่6): Take 2 closet datapoints or clusters and merge them to form one cluster.

Apply single linkage

Step2 (ครั้งที่7): Take 2 closet datapoints or clusters and merge them to form one cluster.

Apply single linkage

Step2 (ครั้งที่8): Take 2 closet datapoints or clusters and merge them to form one cluster.

Apply single linkage

Step2 (ครั้งที่9): Take 2 closet datapoints or clusters and merge them to form one cluster.

Apply single linkage

Step4: Develop the dendrogram to divide the clusters