DBSCAN: 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: Choose a value for eps and MinPts.

eps = ...

MinPts = ...

Step2: For a particular datapoint (x) calculate its distance from every other datapoints

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

Step8: Repeat the above steps for every unvisited point.

Step3: Find all the neighborhood points of x (fall inside eps radius)

d1's neighborhood points = {.....}

Step4-6:

{core point, border point, outlier}

Step7: include all the density connected points as a single cluster.

Step3: Find all the neighborhood points of x (fall inside eps radius)

d2's neighborhood points = {.....}

Step4-6:

{core point, border point, outlier}

Step7: include all the density connected points as a single cluster.

Step3: Find all the neighborhood points of x (fall inside eps radius)

d3's neighborhood points = {.....}

Step4-6:

{core point, border point, outlier}

Step7: include all the density connected points as a single cluster.

Step3: Find all the neighborhood points of x (fall inside eps radius)

d4's neighborhood points = {.....}

Step4-6:

{core point, border point, outlier}

Step7: include all the density connected points as a single cluster.

Step3: Find all the neighborhood points of x (fall inside eps radius)

d5's neighborhood points = {.....}

Step4-6:

{core point, border point, outlier}

Step7: include all the density connected points as a single cluster.

Step3: Find all the neighborhood points of x (fall inside eps radius)

d6's neighborhood points = {.....}

Step4-6:

{core point, border point, outlier}

Step7: include all the density connected points as a single cluster.

Step3: Find all the neighborhood points of x (fall inside eps radius)

d7's neighborhood points = {.....}

Step4-6:

{core point, border point, outlier}

Step7: include all the density connected points as a single cluster.

Step3: Find all the neighborhood points of x (fall inside eps radius)

d8's neighborhood points = {.....}

Step4-6:

{core point, border point, outlier}

Step7: include all the density connected points as a single cluster.

Step3: Find all the neighborhood points of x (fall inside eps radius)

d9's neighborhood points = {.....}

Step4-6:

{core point, border point, outlier}

Step7: include all the density connected points as a single cluster.

Step3: Find all the neighborhood points of x (fall inside eps radius)

d10's neighborhood points = {.....}

Step4-6:

{core point, border point, outlier}

Step7: include all the density connected points as a single cluster.