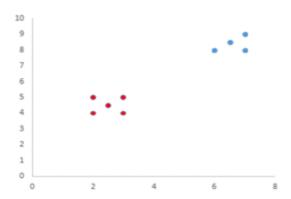
Task 2: Display the records of clusters

A clustering technique called "Unique Neighborhood Set Parameter Independent Density-Based Clustering with Outlier Detection" (PIDC-O) is applied on a dataset having 450 records and two attributes (X, Y). The number of clusters produced by PIDC-O from the dataset is four namely Cluster1, Cluster2, Cluster3 and Cluster4. A text file (cluster.txt) that contains the clusters will be uploaded into the subject interact site soon. For better understanding, the structure of the text file is discussed using the table below.

7 8 CLuster2 3 4 Cluster1				
6 8 Cluster2 7 8 CLuster2 3 4 Cluster1 2 5 CLuster1 3 5 Cluster1 7 9 Cluster2 2.5 4.5 Cluster1	X	Y	Cluster	
7 8 CLuster2 3 4 Cluster1 2 5 CLuster1 3 5 Cluster1 7 9 Cluster2 2.5 4.5 Cluster1	2	4	Cluster1	
 3 4 Cluster1 2 5 CLuster1 3 5 Cluster1 7 9 Cluster2 2.5 4.5 Cluster1 	6	8	Cluster2	
 2 5 CLuster1 3 5 Cluster1 7 9 Cluster2 2.5 4.5 Cluster1 	7	8	CLuster2	
3 5 Cluster1 7 9 Cluster2 2.5 4.5 Cluster1	3	4	Cluster1	
7 9 Cluster2 2.5 4.5 Cluster1	2	5	CLuster1	
2.5 4.5 Cluster1	3	5	Cluster1	
	7	9	Cluster2	
6.5 8.5 Cluster2	2.5	4.5	Cluster1	
	6.5	8.5	Cluster2	

The number of records in the above table is nine, the number of attributes is two (X,Y) and the number of clusters is two (Cluster1, Cluster2) whereas the **cluster.txt** in the subject interact site will have 450 records, two attributes (X,Y) and four clusters (Cluster1, Cluster2, Cluster3, Cluster4). The sample output on the above table is shown below.



Write a Java Graphical User Interface (GUI) program that will read the **cluster.txt** file and will display the records of the clusters in **cluster.txt** file in GUI. The records in a particular will be displayed using a single colour. Add legend for each cluster in the GUI, so that the clusters can be easily identified.