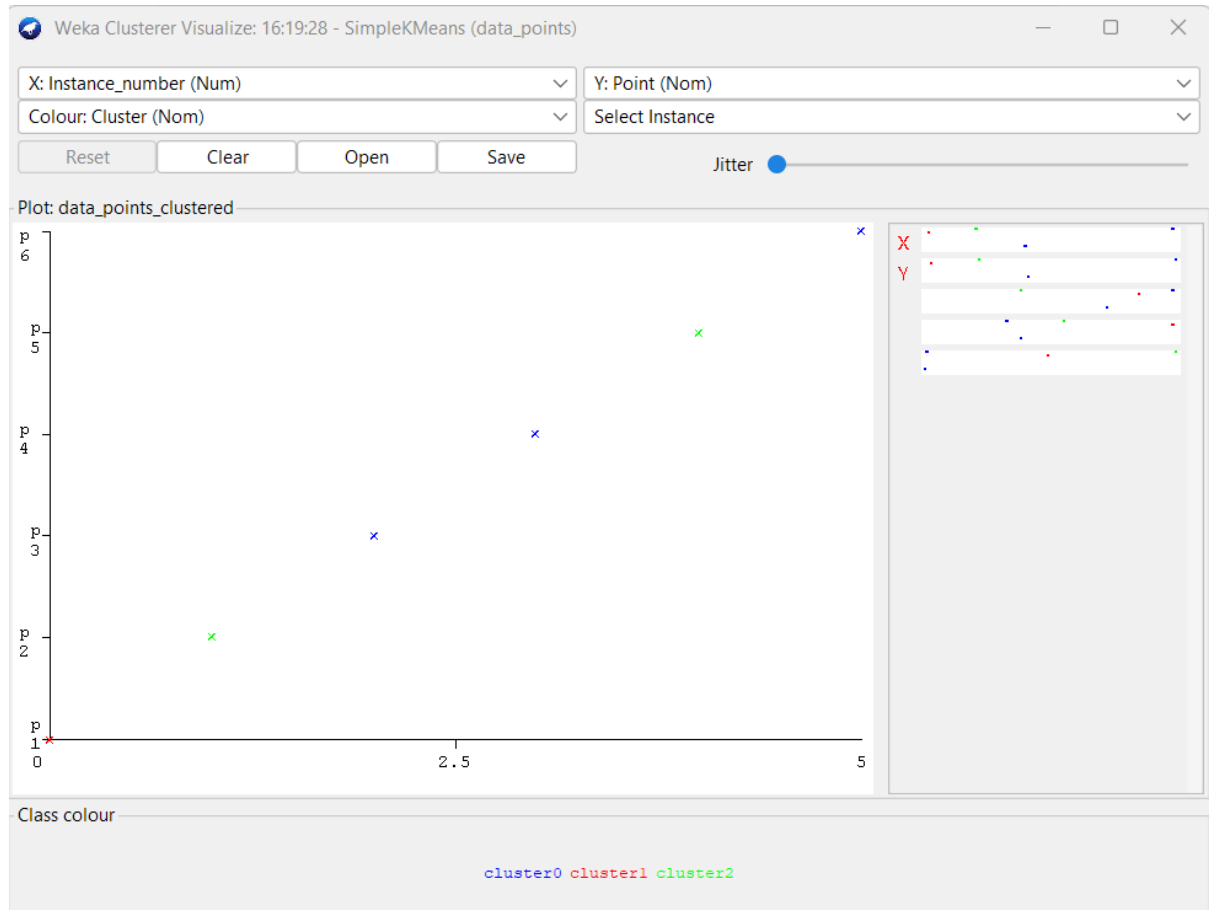


exp7 (k means clustering)

Sakshi Kupekar

9910

4) k-means Weka



Weka Explorer

Preprocess Classify **Cluster** Associate Select attributes Visualize

Clusterer Choose **SimpleKMeans** -init 0 -max-candidates 100 -periodic-pruning 10000 -min-density 2.0 -t1 -1.25 -t2 -1.0 -N 3 -A "weka.core.EuclideanDistance -R first-last" -I 500 -num-slots 1

Cluster mode

☒ Use training set
☐ Supplied test set Set...
☐ Percentage split % 66
☐ Classes to clusters evaluation
 (Num) Spending Score v
☒ Store clusters for visualization

Ignore attributes

Start Stop

Result list (right-click for options)

16:19:28 - SimpleKMeans

Clusterer output

```

=== Run information ===

Scheme:      weka.clusterers.SimpleKMeans -init 0 -max-candidates 100 -periodic-pruning
Relation:    data_points
Instances:    6
Attributes:   3
              Point
              Income
              Spending Score
Test mode:   evaluate on training data

=== Clustering model (full training set) ===

kMeans
=====

Number of iterations: 3
Within cluster sum of squared errors: 3.292227263268127

Initial starting points (random):

Cluster 0: p4,0.26,0.19
Cluster 1: p1,0.4,0.53
Cluster 2: p2,0.22,0.38

Missing values globally replaced with mean/mode

Final cluster centroids:

Attribute      Full Data      Cluster#
              (6.0)      (3.0)      (1.0)      (2.0)
  
```

Status OK Log

Start Stop

Result list (right-click for options)

16:19:28 - SimpleKMeans

Final cluster centroids:

Attribute	Full Data	Cluster# 0	Cluster# 1	Cluster# 2
	(6.0)	(3.0)	(1.0)	(2.0)

	p1	p3	p1	p2
Point				
Income	0.2933	0.3533	0.4	0.15
Spending Score	0.355	0.27	0.53	0.395

Time taken to build model (full training data) : 0 seconds

=== Model and evaluation on training set ===

Clustered Instances

0	3 (50%)
1	1 (17%)
2	2 (33%)

Status OK Log