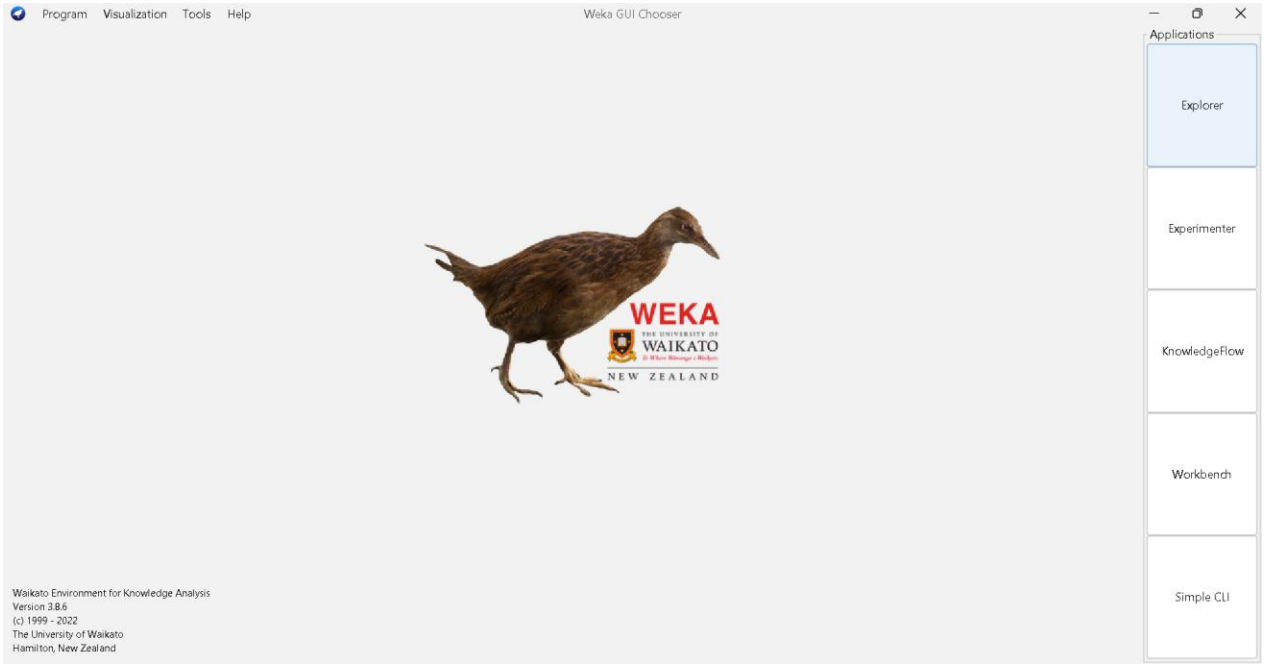
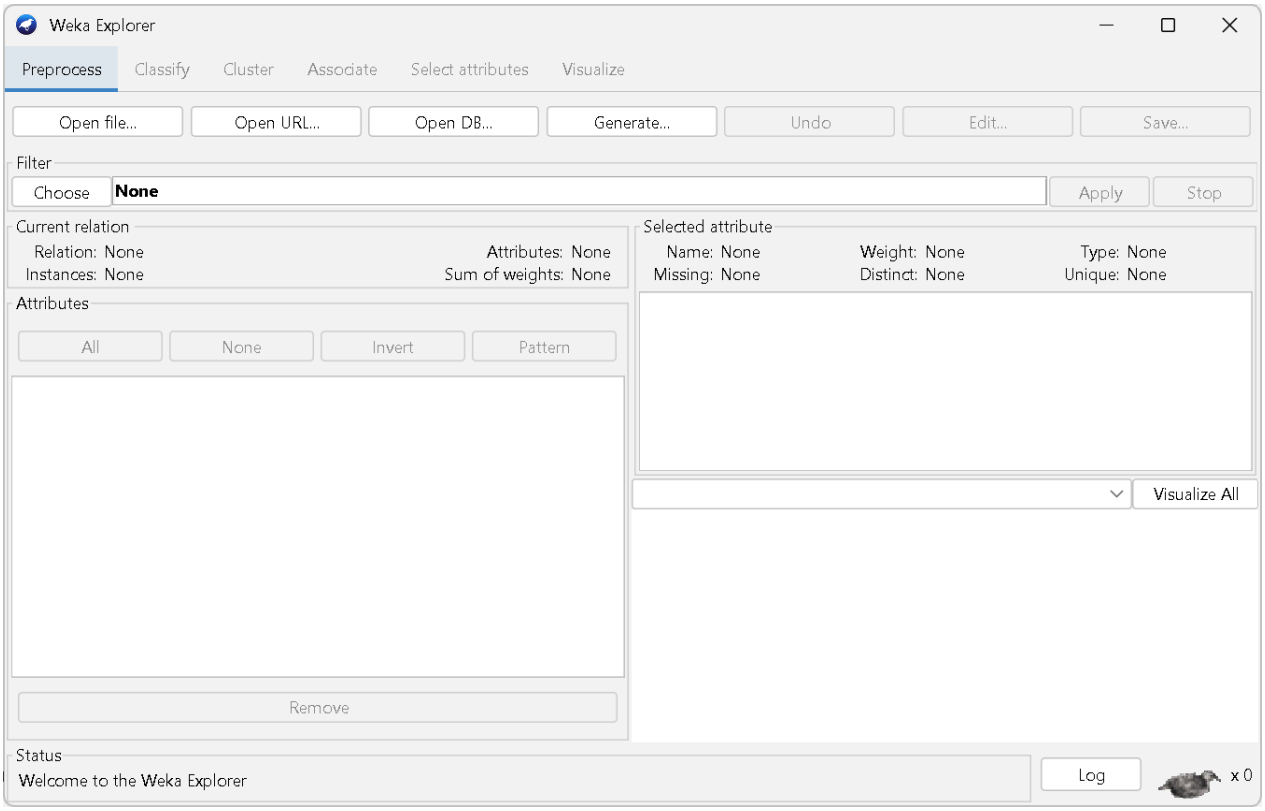
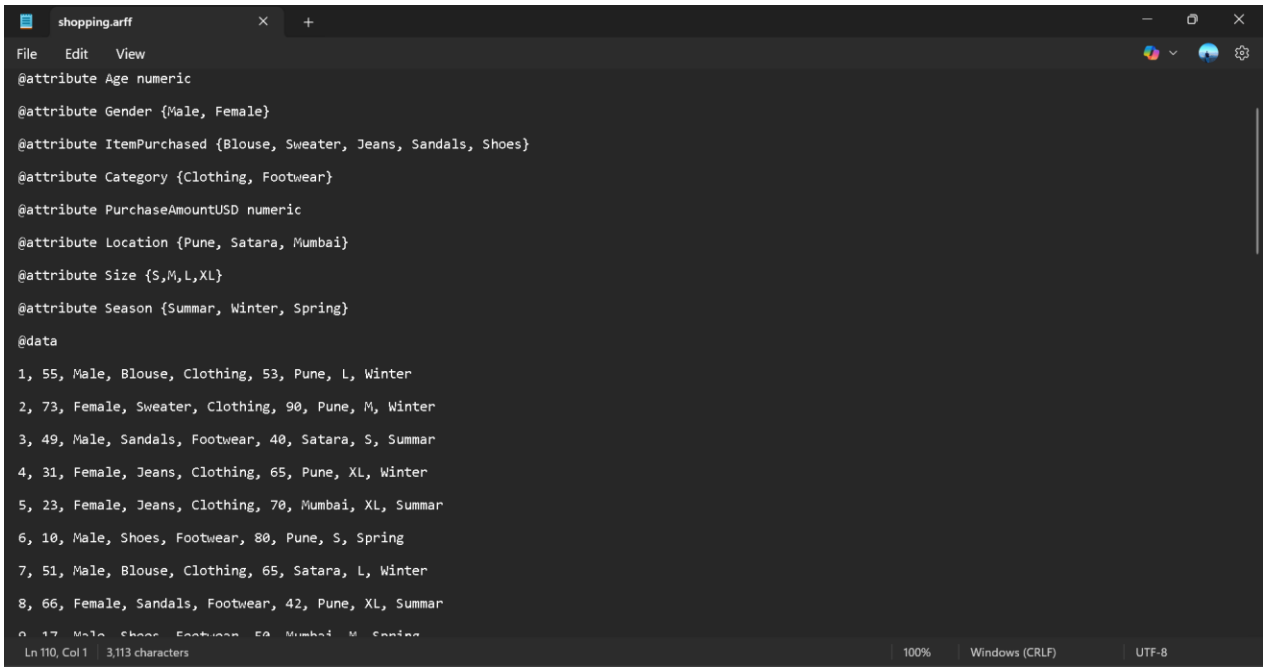
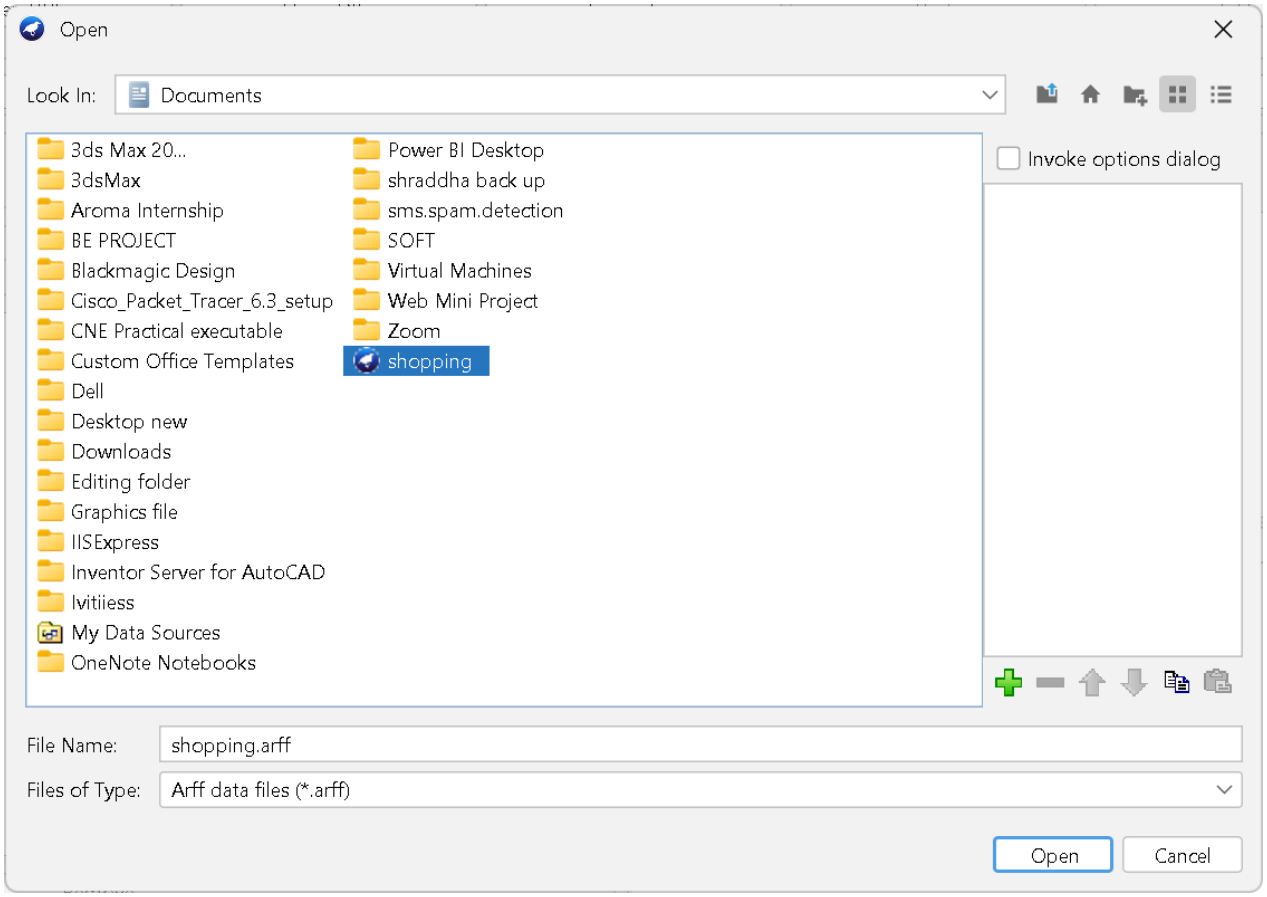
Practical No.1

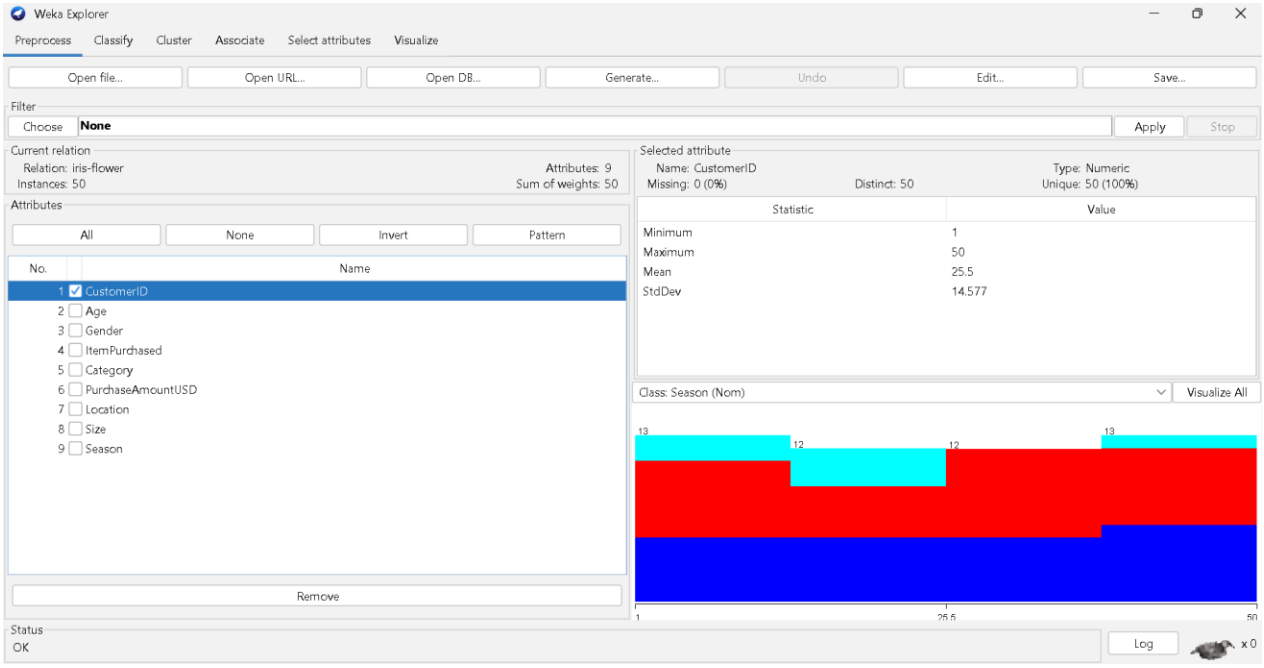


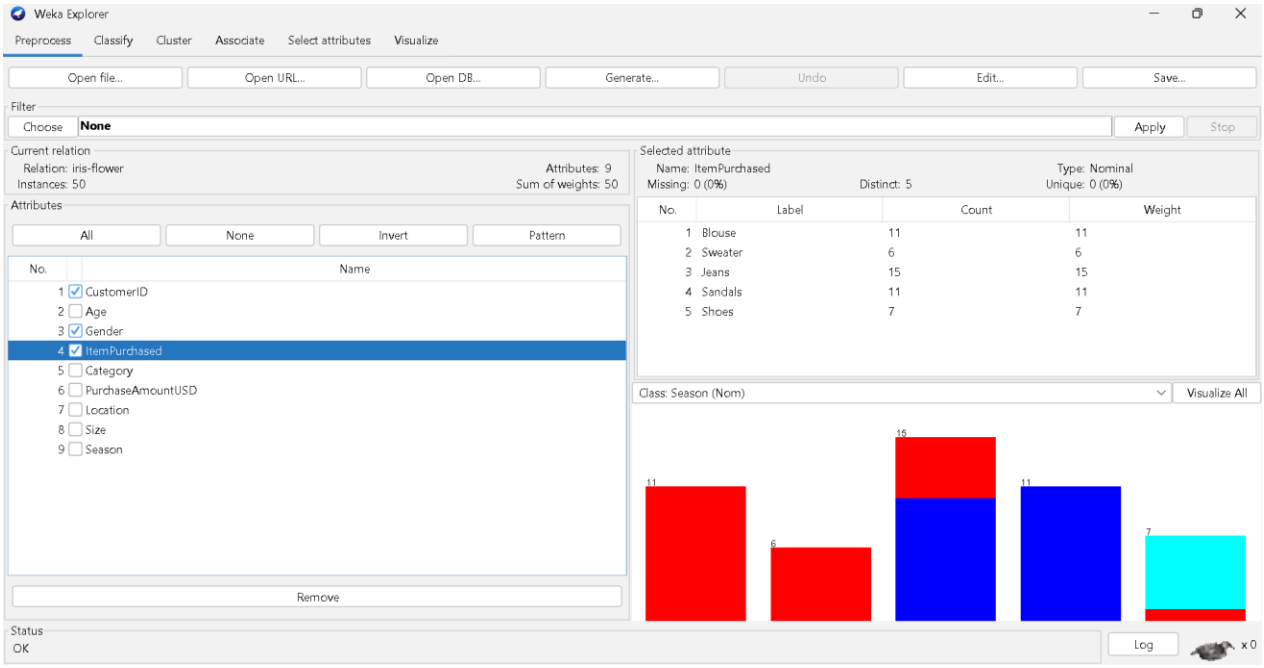


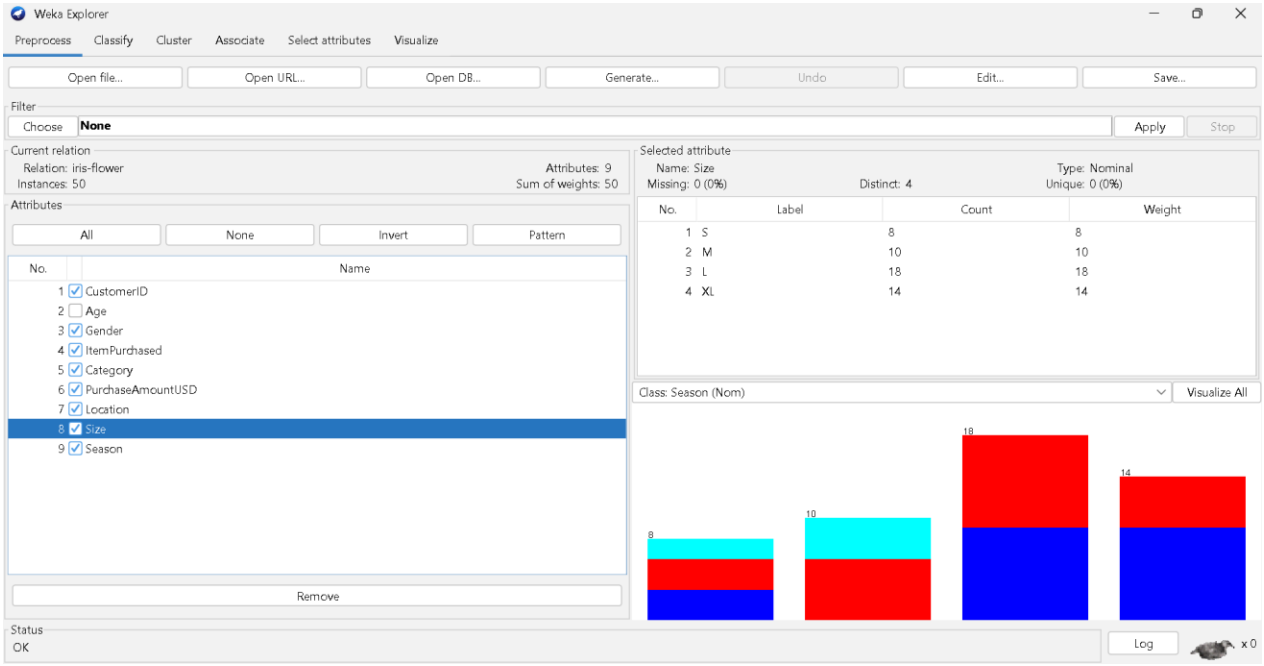
Practical No.2

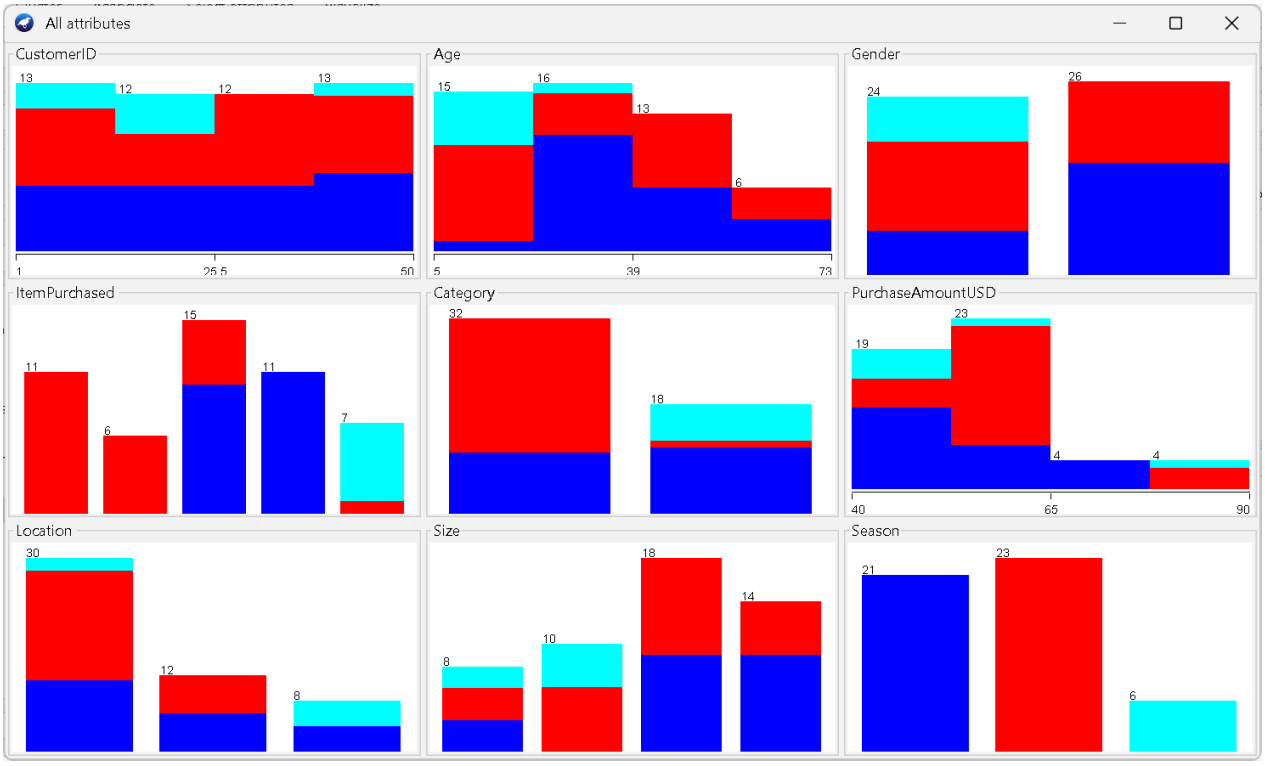




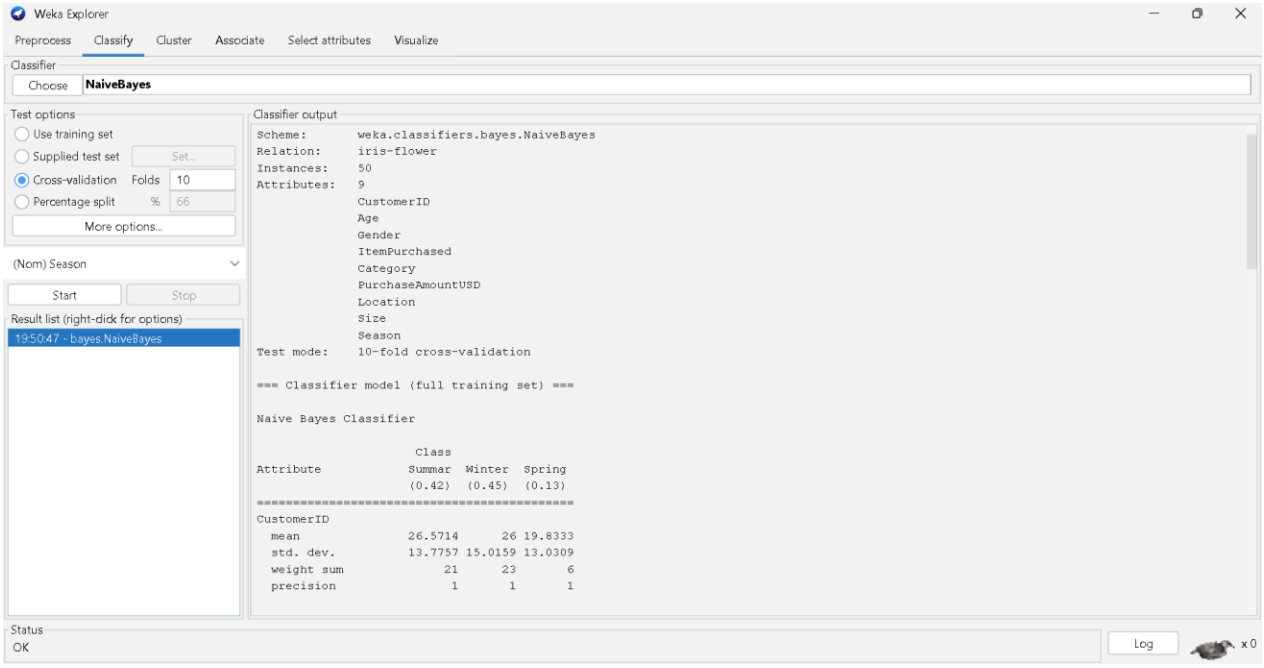

Weka Explorer
Preprocess
Classify
Cluster
Associate
Select attributes
Visualize
Open file...
Open URL...
Open DB...
Generate...
Undo
Edit...
Save...
Filter
Choose
None
Apply
Stop
Current relation
Relation: iris-flower
Instances: 50
Attributes: 9
Sum of weights: 50
Attributes
All
None
Invert
Pattern
No.
Name
1 CustomerID
2 Age
3 Gender
4 ItemPurchased
5 Category
6 PurchaseAmountUSD
7 Location
8 Size
9 Season
Remove
Selected attribute
Name: CustomerID
Missing: 0 (0%)
Distinct: 50
Type: Numeric
Unique: 50 (100%)
Statistic
Value
Minimum 1
Maximum 50
Mean 25.5
StdDev 14.577
Class: Season (Nom)
Visualize All
13
12
12
13
1
25.5
50
Status
OK
Log
x 0

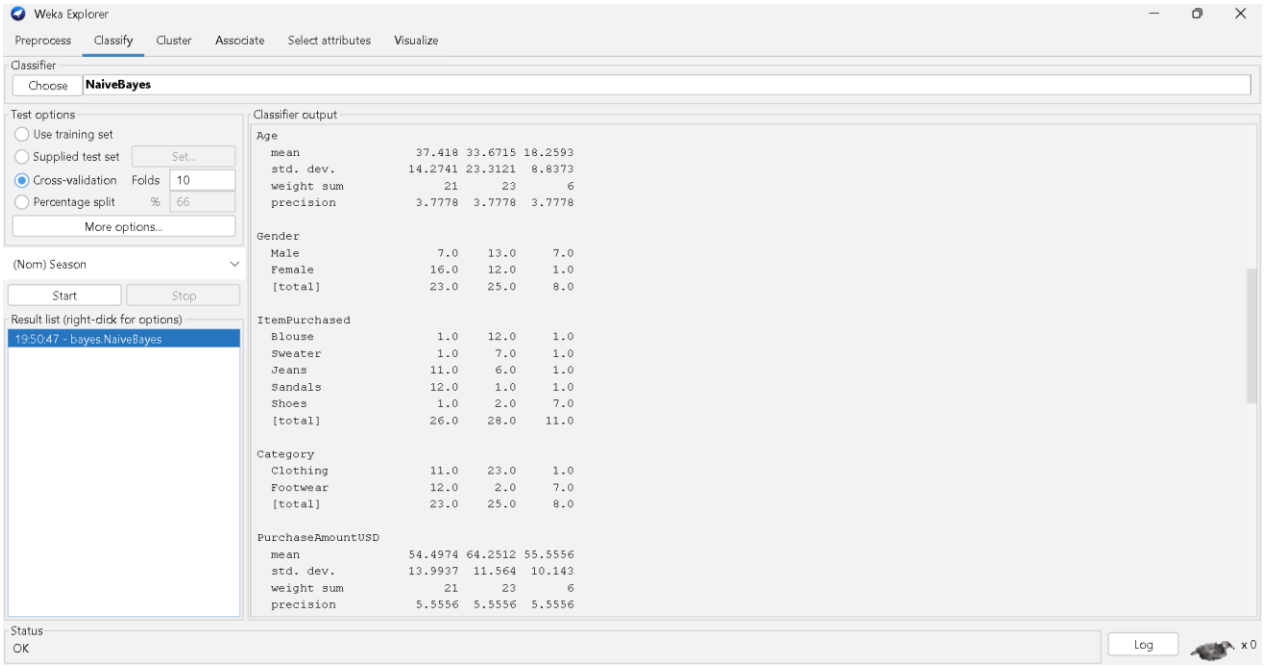

Weka Explorer
Preprocess
Classify
Cluster
Associate
Select attributes
Visualize
Open file...
Open URL...
Open DB...
Generate...
Undo
Edit...
Save...
Filter
Choose
None
Apply
Stop
Current relation
Relation: iris-flower
Instances: 50
Attributes: 9
Sum of weights: 50
Attributes
All
None
Invert
Pattern
No.
Name
1 CustomerID
2 Age
3 Gender
4 ItemPurchased
5 Category
6 PurchaseAmountUSD
7 Location
8 Size
9 Season
Remove
Selected attribute
Name: ItemPurchased
Missing: 0 (0%)
Distinct: 5
Type: Nominal
Unique: 0 (0%)
No.
Label
Count
Weight
1 Blouse 11 11
2 Sweater 6 6
3 Jeans 15 15
4 Sandals 11 11
5 Shoes 7 7
Class: Season (Nom)
Visualize All
11
6
15
11
7
Status
OK
Log
x 0

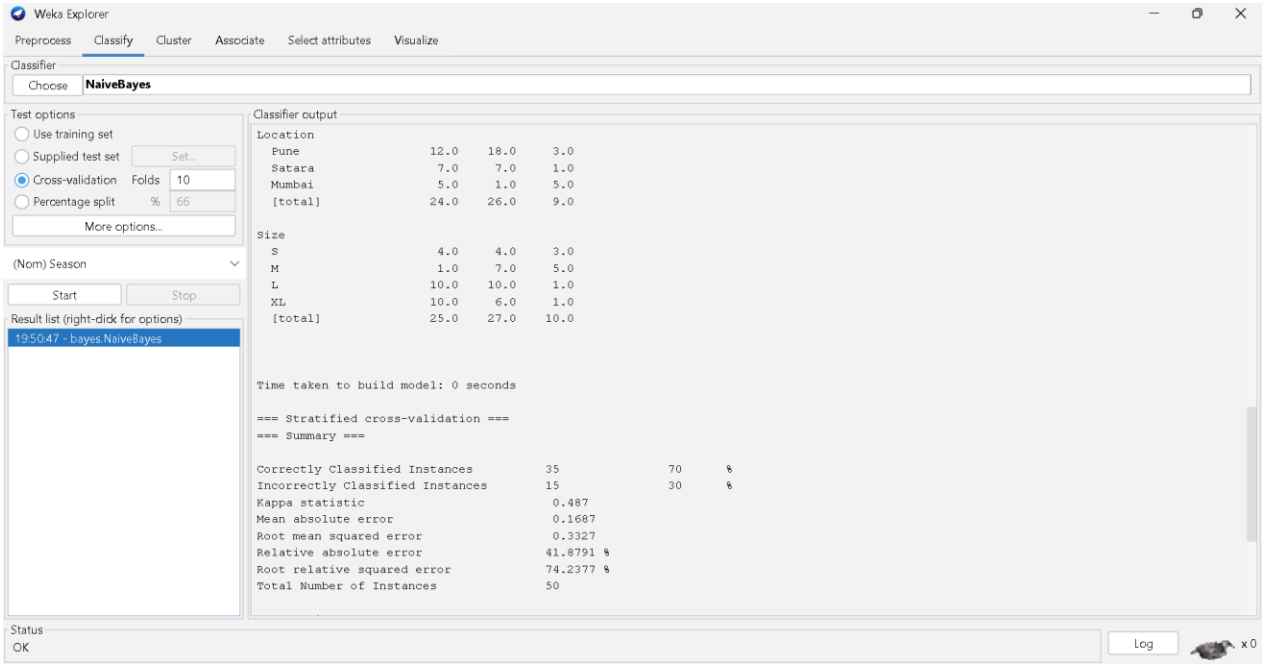

Weka Explorer
Preprocess
Classify
Cluster
Associate
Select attributes
Visualize
Open file...
Open URL...
Open DB...
Generate...
Undo
Edit...
Save...
Filter
Choose
None
Apply
Stop
Current relation
Relation: iris-flower
Instances: 50
Attributes: 9
Sum of weights: 50
Attributes
All
None
Invert
Pattern
No.
Name
1 CustomerID
2 Age
3 Gender
4 ItemPurchased
5 Category
6 PurchaseAmountUSD
7 Location
8 Size
9 Season
Remove
Selected attribute
Name: Size
Missing: 0 (0%)
Distinct: 4
Type: Nominal
Unique: 0 (0%)
No.
Label
Count
Weight
1 S 8 8
2 M 10 10
3 L 18 18
4 XL 14 14
Class: Season (Nom)
Visualize All
8
10
18
14
Status
OK
Log
x 0

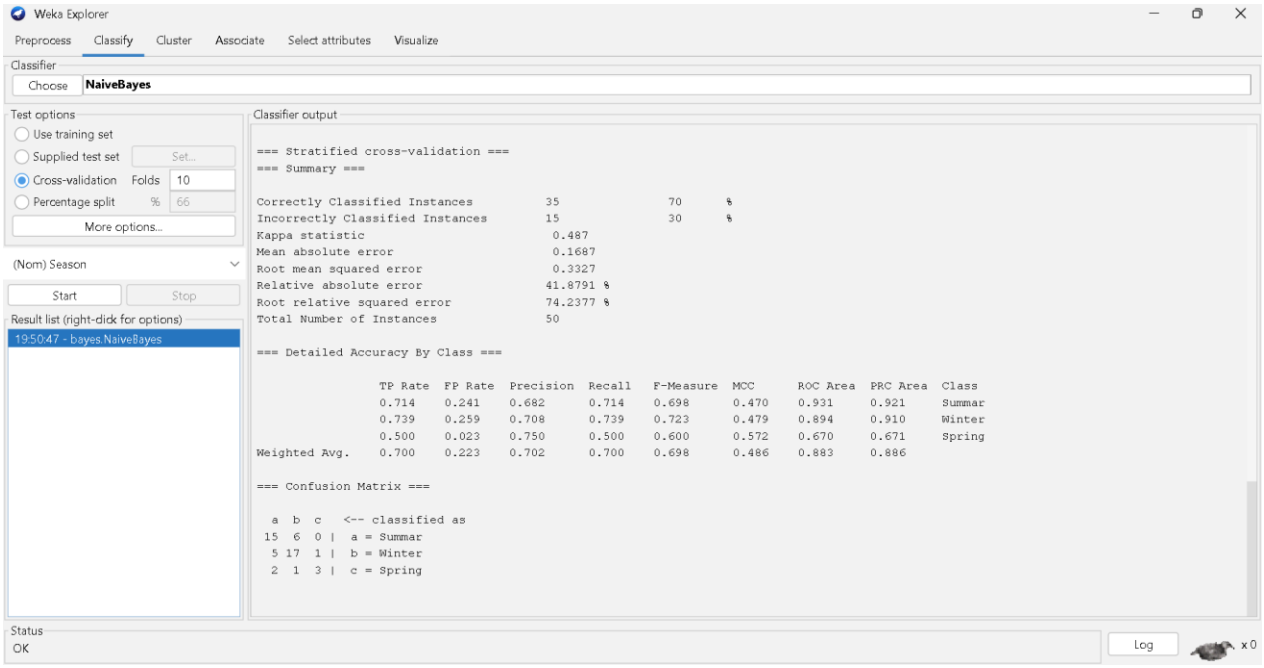

All attributes
CustomerID
13
12
12
13
1
25.5
50
Age
15
16
13
6
5
39
73
Gender
24
26
ItemPurchased
11
6
15
11
7
Category
32
18
PurchaseAmountUSD
19
23
4
4
40
65
90
Location
30
12
8
Size
8
10
18
14
Season
21
23
6

Practical No.3

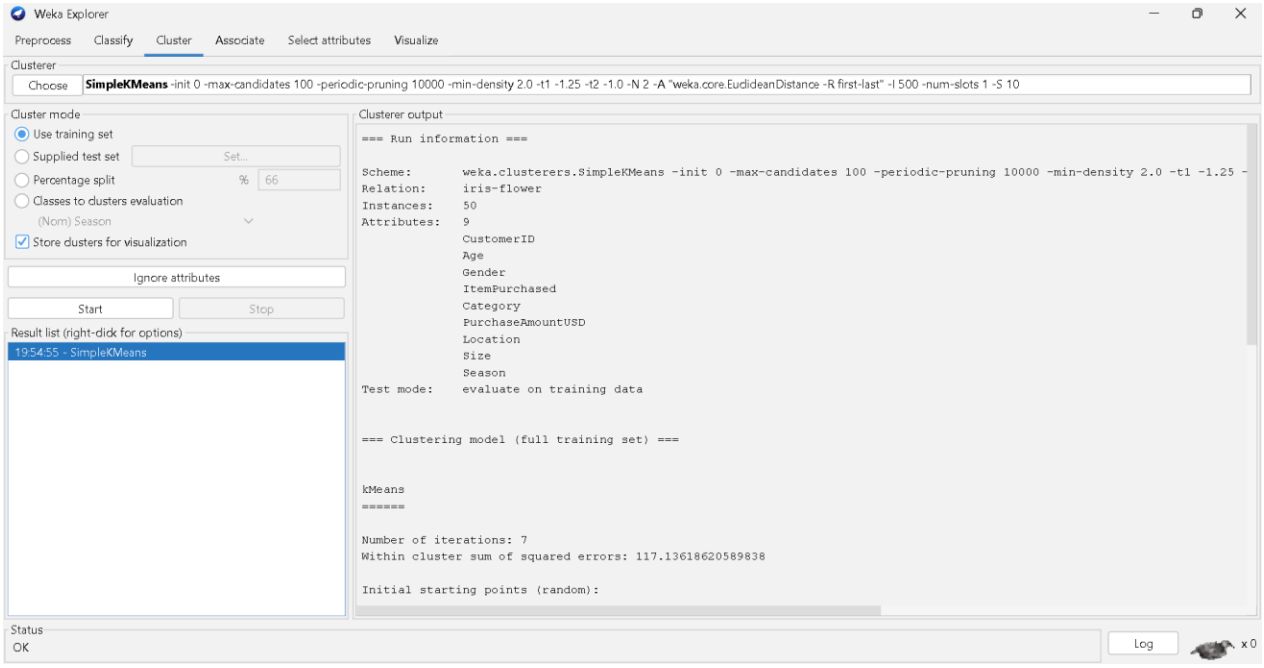


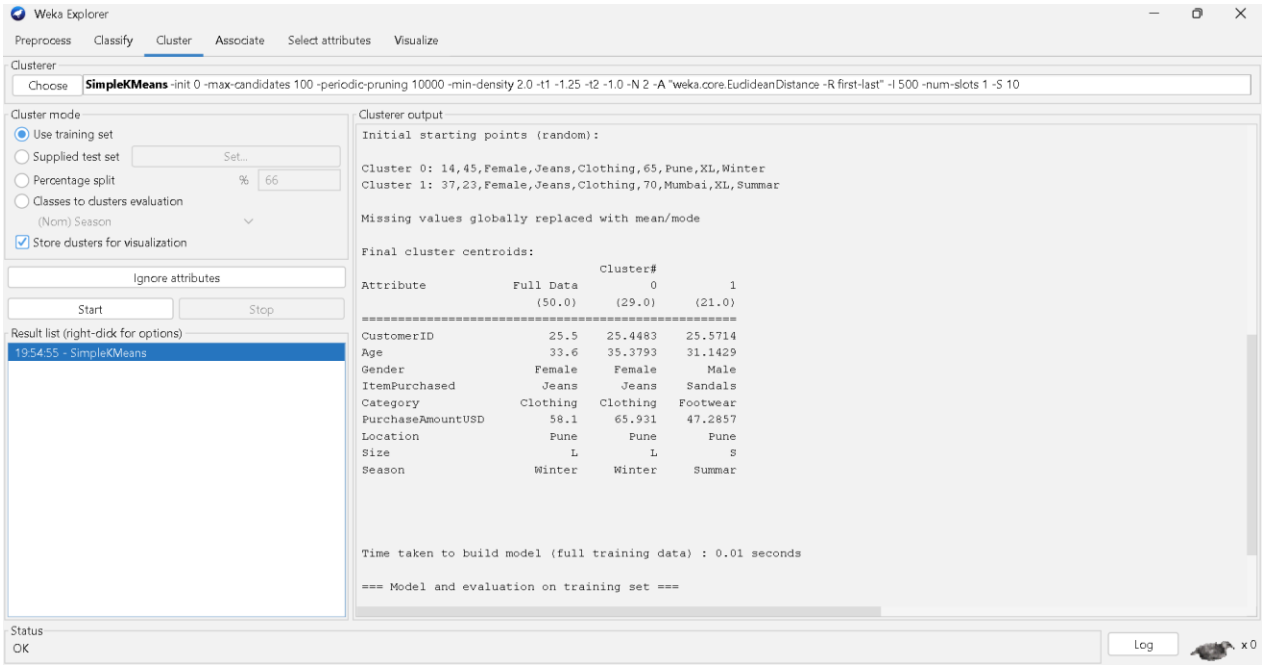


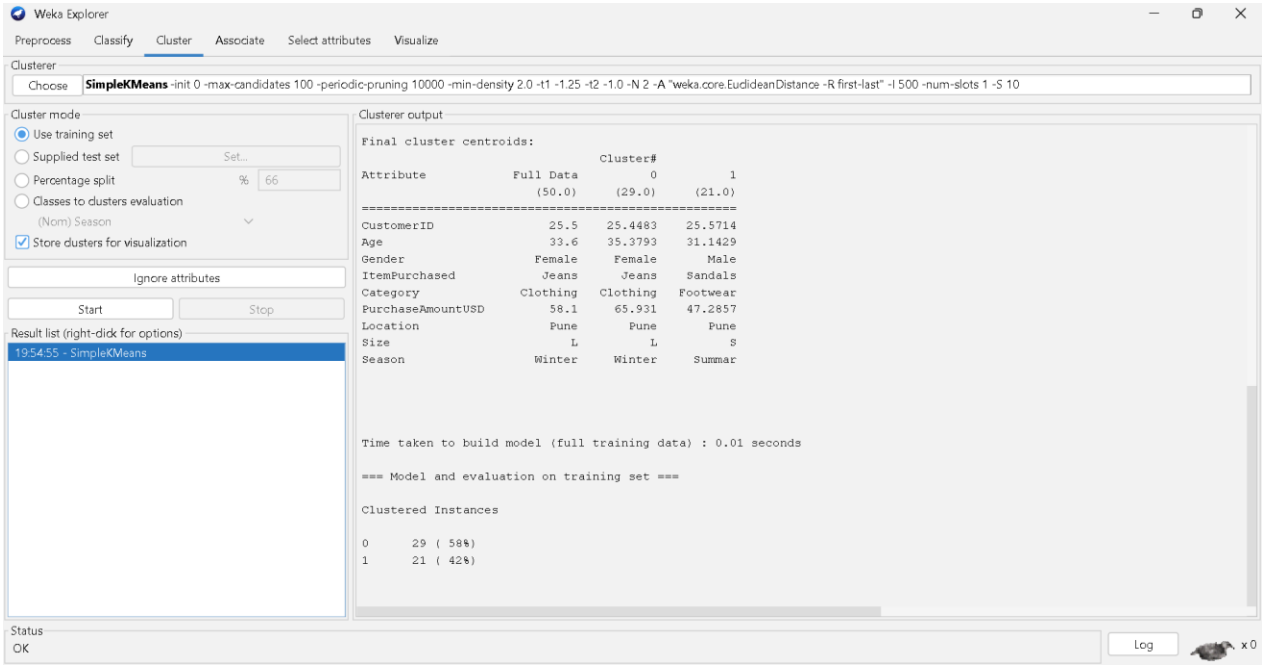

Weka Explorer
Preprocess
Classify
Cluster
Associate
Select attributes
Visualize
Classifier
Choose
NaiveBayes
Test options
Use training set
Supplied test set
Set...
Cross-validation
Folds
10
Percentage split
%
66
More options...
(Nom) Season
Start
Stop
Result list (right-dick for options)
19:50:47 - bayes.NaiveBayes
Classifier output
Location
Pune 12.0 18.0 3.0
Satara 7.0 7.0 1.0
Mumbai 5.0 1.0 5.0
[total] 24.0 26.0 9.0
Size
S 4.0 4.0 3.0
M 1.0 7.0 5.0
L 10.0 10.0 1.0
XL 10.0 6.0 1.0
[total] 25.0 27.0 10.0
Time taken to build model: 0 seconds
=== Stratified cross-validation ===
=== Summary ===
Correctly Classified Instances 35 70 %
Incorrectly Classified Instances 15 30 %
Kappa statistic 0.487
Mean absolute error 0.1687
Root mean squared error 0.3327
Relative absolute error 41.8791 %
Root relative squared error 74.2377 %
Total Number of Instances 50
Status
OK
Log
x 0


Weka Explorer
Preprocess
Classify
Cluster
Associate
Select attributes
Visualize
Classifier
Choose
NaiveBayes
Test options
Use training set
Supplied test set
Set...
Cross-validation
Folds
10
Percentage split
%
66
More options...
(Nom) Season
Start
Stop
Result list (right-dick for options)
19:50:47 - bayes.NaiveBayes
Classifier output
=== Stratified cross-validation ===
=== Summary ===
Correctly Classified Instances 35 70 %
Incorrectly Classified Instances 15 30 %
Kappa statistic 0.487
Mean absolute error 0.1687
Root mean squared error 0.3327
Relative absolute error 41.8791 %
Root relative squared error 74.2377 %
Total Number of Instances 50
=== Detailed Accuracy By Class ===
TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class
0.714 0.241 0.682 0.714 0.698 0.470 0.931 0.921 Summar
0.739 0.259 0.708 0.739 0.723 0.479 0.894 0.910 Winter
0.500 0.023 0.750 0.500 0.600 0.572 0.670 0.671 Spring
Weighted Avg. 0.700 0.223 0.702 0.700 0.698 0.486 0.883 0.886
=== Confusion Matrix ===
a b c <-- classified as
15 6 0 | a = Summar
5 17 1 | b = Winter
2 1 3 | c = Spring
Status
OK
Log
x 0

Practical No.6






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 2 -A "weka.core.EuclideanDistance -R first-last" -I 500 -num-slots 1 -S 10
Cluster mode
Use training set
Supplied test set
Set...
Percentage split
%
66
Classes to clusters evaluation
(Nom) Season
Store clusters for visualization
Ignore attributes
Start
Stop
Result list (right-click for options)
19:54:55 - SimpleKMeans
Clusterer output
Final cluster centroids:
Cluster#
Attribute Full Data 0 1
(50.0) (29.0) (21.0)
CustomerID 25.5 25.4483 25.5714
Age 33.6 35.3793 31.1429
Gender Female Female Male
ItemPurchased Jeans Jeans Sandals
Category Clothing Clothing Footwear
PurchaseAmountUSD 58.1 65.931 47.2857
Location Pune Pune Pune
Size L L S
Season Winter Winter Summar
Time taken to build model (full training data) : 0.01 seconds
=== Model and evaluation on training set ===
Clustered Instances
0 29 (58%)
1 21 (42%)
Status
OK
Log
x 0