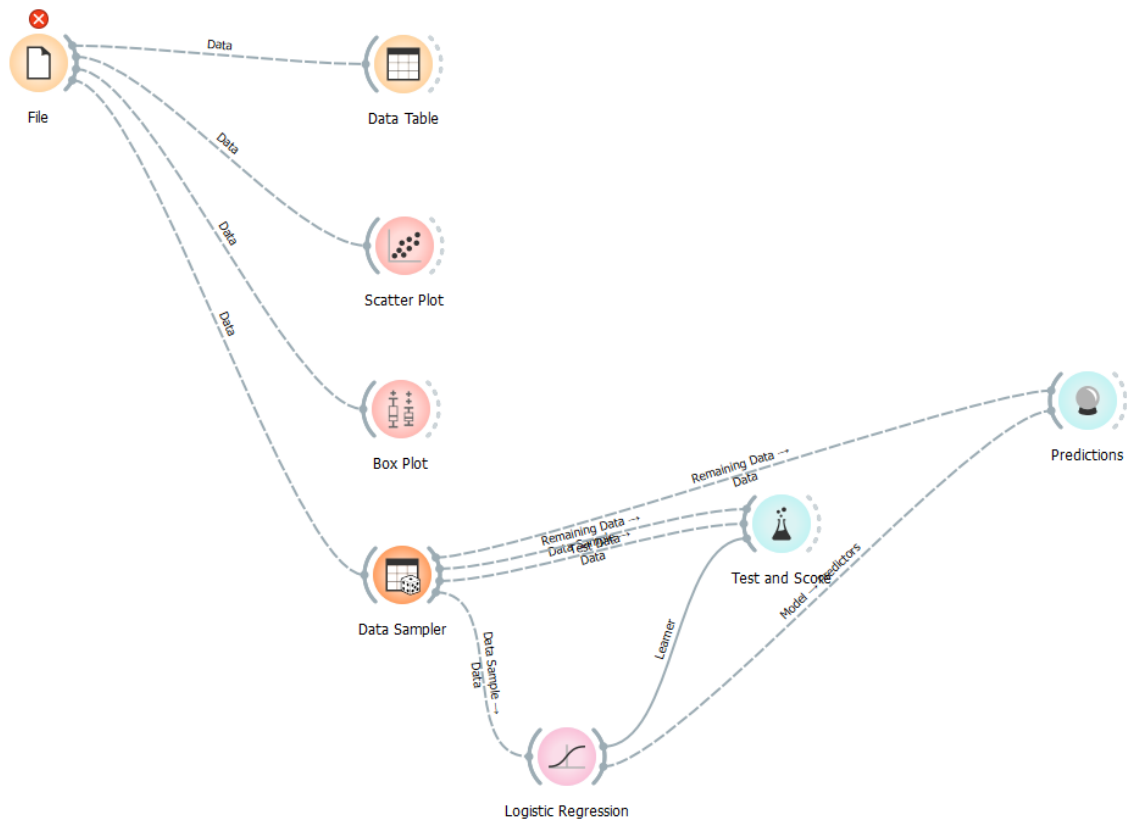


Nama : Terryanda Naufaldo Arhaby

NIM : 1103213107

Kelas : TK45-05

## Tugas week 2 Orange Data



Data Table - Orange

Info  
150 instances (no missing data)  
4 features  
Target with 3 values  
No meta attributes.

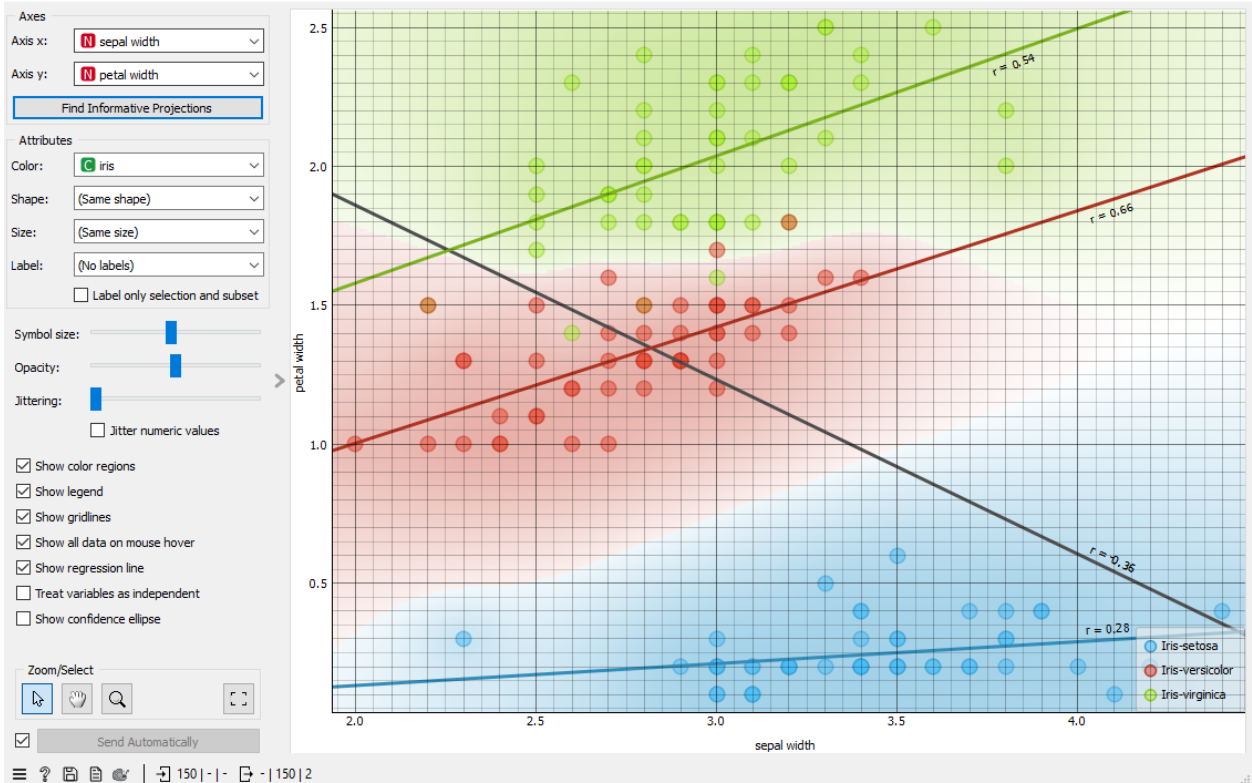
Variables  
☐ Show variable labels (if present)  
☒ Visualize numeric values  
☐ Color by instance classes

Selection  
☒ Select full rows

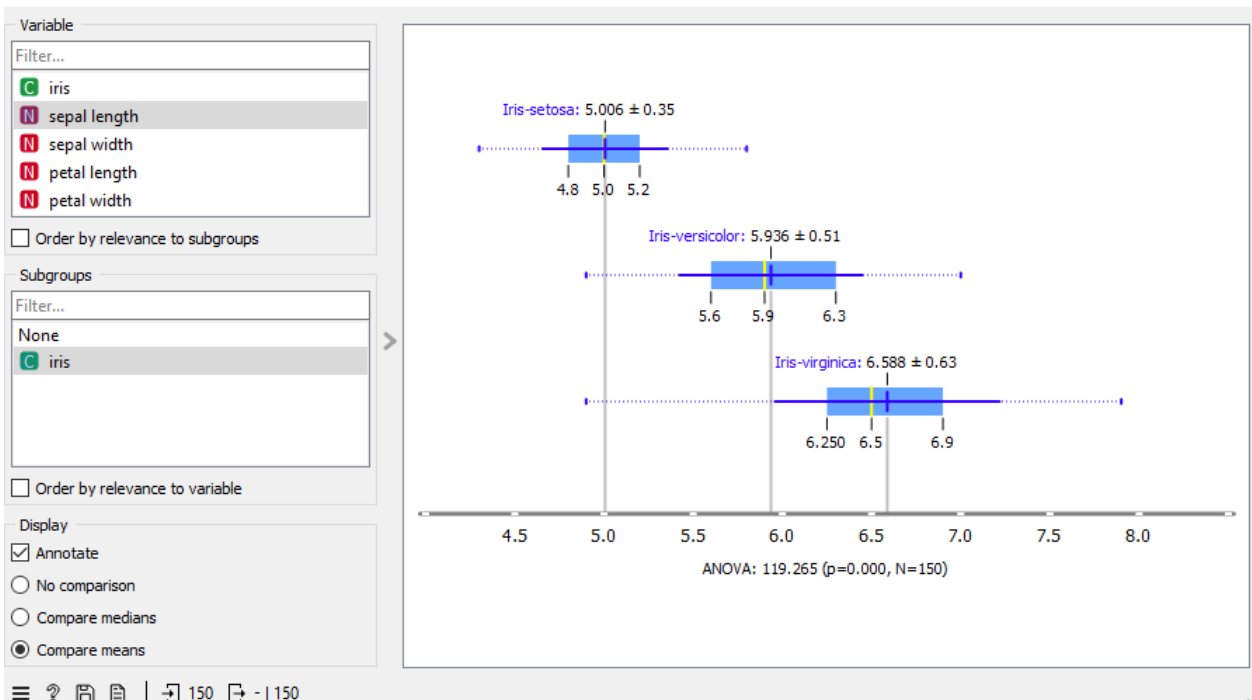
	iris	sepal length	sepal width	petal length	petal width
1	iris-setosa	5.1	3.5	1.4	0.2
2	iris-setosa	4.9	3.0	1.4	0.2
3	iris-setosa	4.7	3.2	1.3	0.2
4	iris-setosa	4.6	3.1	1.5	0.2
5	iris-setosa	5.0	3.6	1.4	0.2
6	iris-setosa	5.4	3.9	1.7	0.4
7	iris-setosa	4.6	3.4	1.4	0.3
8	iris-setosa	5.0	3.4	1.5	0.2
9	iris-setosa	4.4	2.9	1.4	0.1
10	iris-setosa	4.9	3.1	1.5	0.1
11	iris-setosa	5.4	3.7	1.5	0.2
12	iris-setosa	4.8	3.4	1.6	0.2
13	iris-setosa	4.8	3.0	1.4	0.1
14	iris-setosa	4.3	3.0	1.1	0.1
15	iris-setosa	5.8	4.0	1.2	0.2
16	iris-setosa	5.7	4.4	1.5	0.4
17	iris-setosa	5.4	3.9	1.3	0.4
18	iris-setosa	5.1	3.5	1.4	0.3
19	iris-setosa	5.7	3.8	1.7	0.3
20	iris-setosa	5.1	3.8	1.5	0.3
21	iris-setosa	5.4	3.4	1.7	0.2
22	iris-setosa	5.1	3.7	1.5	0.4
23	iris-setosa	4.6	3.6	1.0	0.2
24	iris-setosa	5.1	3.3	1.7	0.5
25	iris-setosa	4.8	3.4	1.9	0.2
26	iris-setosa	5.0	3.0	1.6	0.2
27	iris-setosa	5.0	3.4	1.6	0.4
28	iris-setosa	5.2	3.5	1.5	0.2
29	iris-setosa	5.2	3.4	1.4	0.2
30	iris-setosa	4.7	3.2	1.6	0.2
31	iris-setosa	4.8	3.1	1.6	0.2
32	iris-setosa	5.4	3.4	1.5	0.4
33	iris-setosa	5.2	4.1	1.5	0.1
34	iris-setosa	5.5	4.2	1.4	0.2
35	iris-setosa	4.9	3.1	1.5	0.1
36	iris-setosa	5.0	3.2	1.2	0.2
37	iris-setosa	5.5	3.5	1.3	0.2
38	iris-setosa	4.9	3.1	1.5	0.1
39	iris-setosa	4.4	3.0	1.3	0.2
40	iris-setosa	5.1	3.4	1.5	0.2
41	iris-setosa	5.0	3.5	1.3	0.3
42	iris-setosa	4.5	2.3	1.3	0.3
43	iris-setosa	4.4	3.2	1.3	0.2
44	iris-setosa	5.0	3.5	1.6	0.6
45	iris-setosa	5.1	3.8	1.9	0.4
46	iris-setosa	4.8	3.0	1.4	0.3
47	iris-setosa	5.1	3.8	1.6	0.2
48	iris-setosa	4.6	3.2	1.4	0.2
49	iris-setosa	5.3	3.7	1.5	0.2
50	iris-setosa	5.0	3.3	1.4	0.2
51	iris-setosa	7.0	3.2	4.7	1.4

Restore Original Order  
☒ Send Automatically

Scatter Plot - Orange



Box Plot - Orange



### Data Sampler - Orange

**Sampling Type**

☒ Fixed proportion of data:

85 %

☐ Fixed sample size

Instances: 1

☐ Sample with replacement

☐ Cross validation

Number of subsets: 10

Unused subset: 1

☐ Bootstrap

**Options**

☒ Replicable (deterministic) sampling

☐ Stratify sample (when possible)

**Sample Data**

150 128 | 22

File Data Table

Test and Score - Orange

**Logistic Regression - Orange**

Name: Logistic Regression

Regularization type: Ridge (L2)

Strength: Weak Strong

☒ Balance class distribution

☒ Apply Automatically

**Test and Score - Orange**

☒ Cross validation

Number of folds: 5

☒ Stratified

☐ Cross validation by feature

☐ Random sampling

Repeat train/test: 10

Training set size: 66 %

☒ Stratified

☐ Leave one out

☐ Test on train data

☐ Test on test data

Logistic Regression

Model AUC CA F1 Prec Recall MCC

Logistic Regression 0.997 0.953 0.953 0.954 0.953 0.930

Compare models by: Area under ROC curve

Negligible diff.: 0.1

Logistic ...

Table shows probabilities that the score for the model in the row is higher than that of the model in the column. Small numbers show the probability that the difference is negligible.

Logistic regression

128 | 22 | 1x128

Predictions - Orange

Show probabilities for Classes known to the model

☒ Show classification errors

Restore Original Order

	Logistic Regression	error	iris	sepal length	sepal width
1	0.98 : 0.02 : 0.00 → Iris-setosa	0.020	Iris-setosa	5.1	3.7
2	0.16 : 0.84 : 0.00 → Iris-versicolor	0.160	Iris-versicolor	4.9	2.4
3	0.00 : 0.02 : 0.98 → Iris-virginica	0.016	Iris-virginica	6.7	3.3
4	0.00 : 0.12 : 0.88 → Iris-virginica	0.122	Iris-virginica	7.2	3.0
5	0.97 : 0.03 : 0.00 → Iris-setosa	0.032	Iris-setosa	4.9	3.1
6	0.00 : 0.03 : 0.97 → Iris-virginica	0.025	Iris-virginica	6.7	3.1
7	0.97 : 0.03 : 0.00 → Iris-setosa	0.029	Iris-setosa	4.9	3.0
8	0.00 : 0.66 : 0.34 → Iris-versicolor	0.339	Iris-versicolor	6.9	3.1
9	0.00 : 0.03 : 0.97 → Iris-virginica	0.026	Iris-virginica	7.4	2.8
10	0.00 : 0.11 : 0.89 → Iris-virginica	0.109	Iris-virginica	6.3	2.9
11	0.02 : 0.94 : 0.04 → Iris-versicolor	0.064	Iris-versicolor	5.7	2.8
12	0.00 : 0.14 : 0.86 → Iris-virginica	0.143	Iris-virginica	6.5	3.0
13	0.00 : 0.90 : 0.10 → Iris-versicolor	0.102	Iris-versicolor	6.3	2.3
14	0.01 : 0.93 : 0.06 → Iris-versicolor	0.072	Iris-versicolor	6.4	2.9
15	0.00 : 0.29 : 0.71 → Iris-virginica	0.289	Iris-virginica	5.6	2.8
16	0.00 : 0.31 : 0.69 → Iris-virginica	0.313	Iris-virginica	5.9	3.0
17	0.95 : 0.05 : 0.00 → Iris-setosa	0.053	Iris-setosa	5.4	3.4
18	0.02 : 0.95 : 0.03 → Iris-versicolor	0.052	Iris-versicolor	6.1	2.8
19	0.01 : 0.69 : 0.31 → Iris-versicolor	0.695	Iris-virginica	4.9	2.5
20	0.99 : 0.01 : 0.00 → Iris-setosa	0.012	Iris-setosa	5.8	4.0
21	0.02 : 0.95 : 0.03 → Iris-versicolor	0.048	Iris-versicolor	5.8	2.6
22	0.00 : 0.03 : 0.97 → Iris-virginica	0.026	Iris-virginica	7.1	3.0

☒ Show performance scores

Target class: (Average over classes)

Model	AUC	CA	F1	Prec	Recall	MCC
Logistic Regression	0.994	0.955	0.955	0.960	0.955	0.933

22 | 22 | 1x22