## 1- Result file "Evaluated start with vowel"

=== Run information ===

Scheme: weka.classifiers.trees.J48 -C 0.25 -M 2

Relation: names2 Instances: 100 Attributes: 3 Names

Vowels Output

Test mode: split 66.0% train, remainder test

=== Classifier model (full training set) ===

## J48 pruned tree

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Vowels = YES: - (46.0/5.0) Vowels = NO: + (54.0/9.0)

Number of Leaves: 2

Size of the tree: 3

Time taken to build model: 0.03 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0.02 seconds

=== Summary ===

Correctly Classified Instances 30 88.2353 % Incorrectly Classified Instances 4 11.7647 %

Kappa statistic 0.7647

Mean absolute error 0.231

Root mean squared error 0.3218

Relative absolute error 45.8752 %

Root relative squared error 63.8172 %

Total Number of Instances 34

=== Detailed Accuracy By Class ===

TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class 0.842 0.067 0.941 0.842 0.889 0.770 0.888 0.881 - 0.933 0.158 0.824 0.933 0.875 0.770 0.888 0.798 + Weighted Avg. 0.882 0.107 0.889 0.882 0.883 0.770 0.888 0.844

=== Confusion Matrix ===

a b <-- classified as 16 3 | a = -1 14 | b = +

# 2- Result file "Evaluated using Length of characters less than equal to 5" === Run information === Scheme: weka.classifiers.trees.J48 -C 0.25 -M 2 Relation: names3 Instances: 100 Attributes: 3 Names Length Output Test mode: evaluate on training data === Classifier model (full training set) === J48 pruned tree Length = False: -(55.0/21.0)Length = True: +(45.0/16.0)Number of Leaves: 2 Size of the tree: 3 Time taken to build model: 0 seconds === Evaluation on training set === Time taken to test model on training data: 0 seconds === Summary === **Correctly Classified Instances** 63 63 % **Incorrectly Classified Instances** 37 37 % Kappa statistic 0.26 Mean absolute error 0.4659 Root mean squared error 0.4826

93.1717 %

100

96.5255 %

Relative absolute error

Root relative squared error

**Total Number of Instances** 

=== Detailed Accuracy By Class ===

TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class 0.680 0.420 0.618 0.680 0.648 0.261 0.630 0.580 - 0.580 0.320 0.644 0.580 0.611 0.261 0.630 0.584 + Weighted Avg. 0.630 0.370 0.631 0.630 0.629 0.261 0.630 0.582

=== Confusion Matrix ===

a b <-- classified as 34 16 | a = -21 29 | b = +

## 3- Result using even odd number of characters

=== Run information ===

Scheme: weka.classifiers.trees.J48 -C 0.25 -M 2

Relation: names1
Instances: 100
Attributes: 3
Names

Even odd Output

Test mode: evaluate on training data

=== Classifier model (full training set) ===

## J48 pruned tree

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Even odd <= 5: - (55.0/21.0) Even odd > 5: + (45.0/16.0)

Number of Leaves: 2

Size of the tree: 3

Time taken to build model: 0 seconds

=== Evaluation on training set ===

Time taken to test model on training data: 0.01 seconds

=== Summary ===

Correctly Classified Instances 63 63 % Incorrectly Classified Instances 37 37 %

Kappa statistic 0.26

Mean absolute error 0.4659
Root mean squared error 0.4826
Relative absolute error 93.1717 %
Root relative squared error 96.5255 %
Total Number of Instances 100

=== Detailed Accuracy By Class ===

TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class 0.680 0.420 0.618 0.680 0.648 0.261 0.630 0.580 - 0.580 0.320 0.644 0.580 0.611 0.261 0.630 0.584 + Weighted Avg. 0.630 0.370 0.631 0.630 0.629 0.261 0.630 0.582

=== Confusion Matrix ===

a b <-- classified as 34 16 | a = -21 29 | b = +