**Case Study for Data Mining and Analytics**

**[CA923]**

**On**

**“Go For Play Based on Weather”**

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**Go For Play Based on Weather?**

**Data of .arff**

@relation weather

@attribute outlook {sunny, overcast, rainy}

@attribute temperature real

@attribute humidity real

@attribute windy {TRUE, FALSE}

@attribute play {yes, no}

@data

sunny,85,85,FALSE,no

sunny,80,90,TRUE,no

overcast,83,86,FALSE,yes

rainy,70,96,FALSE,yes

rainy,68,80,FALSE,yes

rainy,65,70,TRUE,no

overcast,64,65,TRUE,yes

sunny,72,95,FALSE,no

sunny,69,70,FALSE,yes

rainy,75,80,FALSE,yes

sunny,75,70,TRUE,yes

overcast,72,90,TRUE,yes

overcast,81,75,FALSE,yes

rainy,71,91,TRUE,no

**Classification**

* **Run Information:**
* === Run information ===
* Scheme: weka.classifiers.trees.J48 -C 0.25 -M 2
* Relation: weather
* Instances: 14
* Attributes: 5
* outlook
* temperature
* humidity
* windy
* play
* Test mode: evaluate on training data
* === Classifier model (full training set) ===
* J48 pruned tree
* ------------------
* outlook = sunny
* | humidity <= 75: yes (2.0)
* | humidity > 75: no (3.0)
* outlook = overcast: yes (4.0)
* outlook = rainy
* | windy = TRUE: no (2.0)
* | windy = FALSE: yes (3.0)
* Number of Leaves : 5
* Size of the tree : 8
* Time taken to build model: 0.01 seconds
* === Evaluation on training set ===
* Time taken to test model on training data: 0 seconds
* === Summary ===
* Correctly Classified Instances 14 100 %
* Incorrectly Classified Instances 0 0 %
* Kappa statistic 1
* Mean absolute error 0
* Root mean squared error 0
* Relative absolute error 0 %
* Root relative squared error 0 %
* Coverage of cases (0.95 level) 100 %
* Mean rel. region size (0.95 level) 50 %
* Total Number of Instances 14
* === Detailed Accuracy By Class ===
* TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class
* 1.000 0.000 1.000 1.000 1.000 1.000 1.000 1.000 yes
* 1.000 0.000 1.000 1.000 1.000 1.000 1.000 1.000 no
* Weighted Avg. 1.000 0.000 1.000 1.000 1.000 1.000 1.000 1.000
* === Confusion Matrix ===
* a b <-- classified as
* 9 0 | a = yes
* 0 5 | b = no