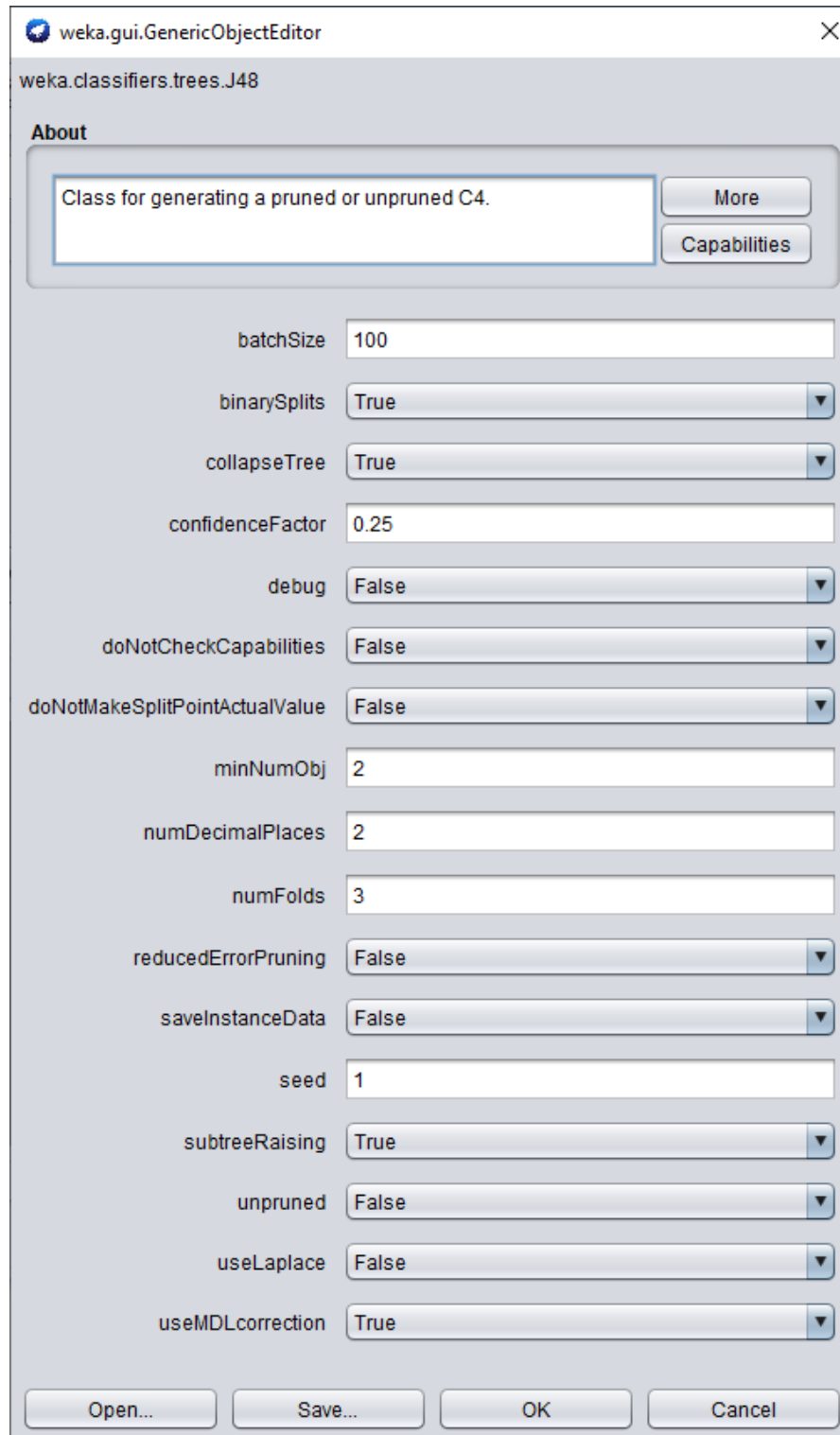


4. Del anterior problema en PYTHON y WEKA realice un árbol de decisión basado en entropía, compare los resultados, esto debe repetirse al menos 10 splits y comparar las matrices de confusión y obtener la confiabilidad. Se recomienda comparar media y mediana de los resultados.

Clasificar un Pokémon es Legendario en base a sus estadísticas:



The image shows a screenshot of the WEKA GUI, specifically the 'weka.gui.GenericObjectEditor' window for the 'weka.classifiers.trees.J48' classifier. The window has a title bar with a close button. Below the title bar, the text 'weka.classifiers.trees.J48' is displayed. The main area is titled 'About' and contains a text box with the placeholder 'Class for generating a pruned or unpruned C4.' and two buttons: 'More' and 'Capabilities'. Below this, there is a list of settings for the J48 classifier, each with a label and a value field (either a text box or a dropdown menu). The settings are: 'batchSize' (100), 'binarySplits' (True), 'collapseTree' (True), 'confidenceFactor' (0.25), 'debug' (False), 'doNotCheckCapabilities' (False), 'doNotMakeSplitPointActualValue' (False), 'minNumObj' (2), 'numDecimalPlaces' (2), 'numFolds' (3), 'reducedErrorPruning' (False), 'saveInstanceData' (False), 'seed' (1), 'subtreeRaising' (True), 'unpruned' (False), 'useLaplace' (False), and 'useMDLcorrection' (True). At the bottom of the window, there are four buttons: 'Open...', 'Save...', 'OK', and 'Cancel'.

Property	Value
batchSize	100
binarySplits	True
collapseTree	True
confidenceFactor	0.25
debug	False
doNotCheckCapabilities	False
doNotMakeSplitPointActualValue	False
minNumObj	2
numDecimalPlaces	2
numFolds	3
reducedErrorPruning	False
saveInstanceData	False
seed	1
subtreeRaising	True
unpruned	False
useLaplace	False
useMDLcorrection	True

Test options

☐ Use training set
 ☐ Supplied test set Set...

☒ Cross-validation Folds

☐ Percentage split %

More options...

(Nom) Legendary

Start

Stop

Result list (right-click for options)

11:15:08 - trees.J48

11:16:13 - trees.J48

11:16:43 - trees.J48

11:17:03 - trees.J48

11:18:43 - trees.J48

11:19:09 - trees.J48

11:21:01 - trees.J48

Classifier output

Time taken to build model: 0.01 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	745	93.125 %
Incorrectly Classified Instances	55	6.875 %
Kappa statistic	0.4854	
Mean absolute error	0.0841	
Root mean squared error	0.2483	
Relative absolute error	55.9426 %	
Root relative squared error	90.8552 %	
Total Number of Instances	800	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0,973	0,538	0,953	0,973	0,963	0,490	0,835	0,975	False
	0,462	0,027	0,600	0,462	0,522	0,490	0,835	0,440	True
Weighted Avg.	0,931	0,497	0,925	0,931	0,927	0,490	0,835	0,931	

=== Confusion Matrix ===

a	b	<-- classified as
715	20	a = False
35	30	b = True

