

## DWDM (WEKA ASSIGNMENT)

Data set Used: **VOTE**

Classifier	Test Options	Corrected Classified	Incorrect Classified	TP	F-Measure	Time Taken
NAÏVE BAYES	Training Set	90.34%	9.65%	0.90	0.90	0.03
	% Split (66%)	91.21%	8.78%	0.91	0.91	0
	Cross Validation (4)	90.57%	9.42%	0.90	0.90	0
DECISION TREE (RANDOM FOREST)	Training Set	99.31%	0.68%	0.99	0.99	0.08
	% Split (66%)	98.64%	1.35%	0.98	0.98	0.01
	Cross Validation (4)	95.40%	4.59%	0.95	0.95	0.09
DECISION TREE (J48)	Training Set	97.24%	2.75%	0.97	0.97	0.01
	% Split (66%)	97.29%	2.70%	0.97	0.97	0
	Cross Validation (4)	95.63%	4.36%	0.95	0.95	0
IBK	Training Set	99.77%	0.22%	0.99	0.99	0.07
	% Split (66%)	91.89%	8.10%	0.91	0.91	0
	Cross Validation (4)	93.10%	6.89%	0.93	0.93	0

### Conclusion

After using the predefined data set (Vote) of Weka, we concluded that *Training Set Method* of **IBK Classifier** was having the highest accuracy of **99.77%** but if we compare all three test options, **Decision Tree (Random Forest)** was leading the chart with an average of **97.78% of accuracy**.

On the grounds of speed, **Decision Tree (J48)** was the fastest classifier for the given data set as total time taken for all three test options was only **0.01 seconds** and the slowest classifier was **Decision Tree (random Forest)** of which all three testing options took **0.18 Seconds**.

Submitted By:

Ayush Soni (14030121029)

Piyush Modi (14030121039)