Three classification result tables

	Naïve Bayes	**ID3**	**C4.5**
Algorithm	Prior Probabilities	Entropy& Information Gain	GAIN RATIO
Equation Used	$p(c_k\|X) = \frac{p(c_k)p(X\|c_k)}{p(x)}$	$IG(A,S) = H(S) - \sum_{t\in T} p(t)H(t)$	$GR = \frac{Information\ Gain}{Entropy}$
Correctly Classified Instances	77.5281%	74.9064 %	79.7753%
Incorrectly Classified Instances	22.4719%	25.0936 %	20.2247%
Kappa statistic	0.441	0.2277	0.3817
Mean absolute error	0.2326	0.2707	0.2472
Root mean squared error	0.4262	0.4845	0.3784
Relative absolute error	70.7317%	82.3237 %	75.1822%
Root relative squared error	105.3826%	119.7822 %	93.5518%
Total Number of Instances	267	267	267
Handle missing value	Do not handle	Do not handle	Can handle
Attribute type	Only categorical	Only categorical	Categorical and numeric

A performance comparison table.

	Naïve Bayes	**ID3**	**C4.5**
Accuracy	77.5281	74.9064	79.7753
Speed[1]	0.03 seconds[2] Quickest	0.22 seconds Better than c4.5 but not better than NB	0.32 seconds Slowest

[1] - by using a large dataset of 27768 items

[2] - this time is for running a dataset of 27768 items on a dell inspiron laptop and the comparison is based on the weka results.