Test results (Avg 5 tests):

White Wine

	Decision Tree		Random Forest		Logistic Regression using Limited-memory BFGS
Type	Classifier	Regressor	Classifier	Regressor	Classifier
Completion Time(sec)	5	2	70	70	7.5
Error Rate(%)	44.31	40.41	33.3	33.79	45.41
RMSE	1.25	0.87	1.10	0.61	0.80

Notes:
Random Forest : 25 Trees

Sample Runs:

Decision Tree

```
Decision tree : Classifier
(Time to test:,5,seconds)
Error Percentage = 49.66622162883845
Root Mean Squared Error (RMSE) on test data = 1.2699673576327084
confusion matrix
5.0   11.0   5.0    1.0    0.0
23.0  229.0  151.0  21.0   2.0
14.0  180.0  391.0  109.0  13.0
3.0   20.0   135.0  123.0  25.0
0.0   0.0    13.0   9.0    6.0
Decision tree : Regressor
(Time to test:,2,seconds)
Error Percentage = 41.7890520694259
Root Mean Squared Error (RMSE) on test data = 0.8931574928735142
confusion matrix
0.0  1.0   8.0    4.0    0.0    0.0
2.0  16.0  21.0   20.0   5.0    0.0
2.0  14.0  272.0  148.0  19.0   3.0
1.0  11.0  112.0  409.0  69.0   13.0
1.0  1.0   22.0   91.0   153.0  8.0
0.0  2.0   5.0    23.0   17.0   22.0
```

Random Forest

```
 Random Forest : Classifier
(Time to test:,36,seconds)
Error Percentage = 33.864541832669325
Root Mean Squared Error (RMSE) on test data = 1.0742674084265225
confusion matrix
9.0   0.0    2.0    0.0    0.0
23.0  296.0  103.0  11.0   2.0
16.0  141.0  536.0  127.0  19.0
1.0   5.0    40.0   137.0  14.0
0.0   0.0    2.0    0.0    18.0
Random Forest : Regressor
(Time to test:,37,seconds)
Error Percentage = 34.72775564409031
Root Mean Squared Error (RMSE) on test data = 0.6841984288492927
confusion matrix
2.0   0.0    0.0    0.0    0.0
30.0  287.0  91.0   5.0    2.0
15.0  146.0  527.0  118.0  12.0
2.0   9.0    65.0   152.0  24.0
0.0   0.0    0.0    0.0    15.0
```

Logistic Regression

```
Logistic regression
(Time to test:,8,seconds)
Error Percentage = 45.41095890410959
Root Mean Squared Error (RMSE) on test data = 0.8015396143826315
confusion matrix
0.0  0.0  3.0    3.0    1.0   0.0  0.0
0.0  0.0  30.0   19.0   1.0   0.0  0.0
0.0  1.0  241.0  211.0  2.0   0.0  0.0
0.0  0.0  89.0   496.0  43.0  0.0  0.0
0.0  0.0  9.0    193.0  60.0  0.0  0.0
0.0  0.0  0.0    42.0   15.0  0.0  0.0
0.0  0.0  0.0    0.0    1.0   0.0  0.0
```