Test results (Avg 5 tests):

Red Wine

	Decision Tree		Random Forest		Logistic Regression using Limited-memory BFGS
Type	Classifier	Regressor	Classifier	Regressor	Classifier
Completion Time(sec)	2.5	1.5	15	70	11
Error Rate(%)	40.12	42.19	32.11	32.96	42.19
RMSE	0.91	0.76	0.95	0.62	0.71

Notes:
Random Forest : 25 Trees

Sample Runs:

Decision Tree

```
Decision tree : Classifier
(Time to test:,3,seconds)
Error Percentage = 39.13043478260869
Root Mean Squared Error (RMSE) on test data = 0.947536852558528
confusion matrix
0.0  4.0    2.0    0.0
8.0  135.0  54.0   6.0
8.0  51.0   119.0  27.0
0.0  2.0    11.0   26.0
Decision tree : Regressor
(Time to test:,2,seconds)
Error Percentage = 43.47826086956522
Root Mean Squared Error (RMSE) on test data = 0.806225774829855
confusion matrix
0.0  0.0   4.0    1.0    0.0   0.0
0.0  2.0   12.0   3.0    0.0   0.0
2.0  12.0  126.0  52.0   5.0   0.0
0.0  0.0   43.0   108.0  27.0  2.0
0.0  2.0   7.0    20.0   23.0  2.0
0.0  0.0   0.0    2.0    4.0   1.0
```

Random Forest

```
Random Forest : Classifier
(Time to test:,13,seconds)
Error Percentage = 34.51882845188285
Root Mean Squared Error (RMSE) on test data = 0.9170628027024205
confusion matrix
148.0  53.0   4.0   0.0
48.0   130.0  23.0  4.0
1.0    8.0    34.0  3.0
0.0    0.0    0.0   1.0
Random Forest : Regressor
(Time to test:,10,seconds)
Error Percentage = 34.51882845188285
Root Mean Squared Error (RMSE) on test data = 0.6484613265648224
confusion matrix
152.0  46.0   3.0
45.0   133.0  30.0
0.0    12.0   28.0
```

Logistic Regression

```
Logistic regression
(Time to test:,10,seconds)
Error Percentage = 43.24324324324324
Root Mean Squared Error (RMSE) on test data = 0.6944987273771511
confusion matrix
0.0  0.0  1.0    0.0    0.0   0.0
0.0  0.0  10.0   4.0    0.0   0.0
0.0  0.0  155.0  54.0   1.0   0.0
0.0  0.0  78.0   108.0  14.0  0.0
0.0  0.0  2.0    42.0   10.0  0.0
0.0  0.0  0.0    0.0    2.0   0.0
```