

### Assignment 3 model parameters

**Question 9: Make a Wine price prediction model thru linear regression,**

**Come up with best model on basis of below parameter**

Variable Names	R-square*	Adjusted R-square*	Train data (0.8/0.2 split)			Train data (0.7/0.3 split)		
			Mean Square error	Root Mean Square error (RMSE)	Mean Absolute Percentage Error (MAPE)	Mean Square error	Root Mean Square error (RMSE)	Mean Absolute Percentage Error (MAPE)
Winter Rain	0.957 (0.967)	0.954 (0.965)	0.46	0.68	0.59	0.55	0.74	0.61
AGST	0.995 (0.995)	0.994 (0.994)	0.14	0.37	0.27	0.22	0.47	0.33
HarvestRain	0.729 (0.701)	0.715 (0.682)	0.46	0.68	0.53	0.54	0.74	0.62
Age	0.852 (0.885)	0.844 (0.878)	0.35	0.59	0.54	0.28	0.53	0.48
FrancePop	0.980 (0.980)	0.978 (0.979)	0.31	0.56	0.51	0.26	0.51	0.46
WR+AGST+HR	0.998 (0.999)	0.998 (0.999)	0.21	0.46	0.38	0.27	0.52	0.44
WR+AGST+HR+Age+FP	0.999 (1.000)	0.999 (0.999)	0.22	0.47	0.41	0.28	0.53	0.46

\* With train test split of 80% and 20% respectively.

The values in the parenthesis of R-square and adjusted r-square are for 0.7/0.3 train test split. The values without bracket are for 0.8/0.2 split.

Note: Please check the file “Assignment3\_final.py” file for the rest.