

Find the best model

The find following the machine learning regressor method
using R2 _value

Support Vector Machine(svm)

s.no	C	Linear	Rbf	Poly	sigmoid
1	C10	-0.056	-0.039	-0.0536	-0.054
2	C100	-0.050	0.106	-0.0198	-0.030
3	C500	-0.024	0.592	0.1146	0.070
4	C1000	0.0067	0.7802	0.266	0.185
5	C3000	0.123	0.895	0.637	0.591

Support Vector Machine R2 value=0.895 with C3000

2.Decision Tree:

Normal not used hyper parameter data=88%

S.No	criterion	Splitter	R2 value
1	Squarer error	Best	0.91
2		random	0.725
3	Friedmen_mse	Best	0.89
4		random	0.68
5	Absolute error	Best	0.91
6		Random	0.89
7	Possion	Best	0.90
8		random	

Decision Tree R2 value is (Criterion Absolute error and splitter has best) =91%

3.Random_Forest R2=92%

S.NO	ESTIMATOR	R2_value
1	10	0.928
2	50	0.91
3	100	0.91
4	1000	0.926

4.Multilinear_regressor=87%

Finally we decided best model Random_Forest because it is R2_value 92% with n_estimator =10