

1. **MULTIPLE LINEAR REGRESSION** (R^2 value)=0.9258

2. SUPPORT VECTOR MACHINE

S.NO	HYPER PARAMETER	LINEAR R^2 value	RBF(NON LINEAR) R^2 value	POLY R^2 value	SIGMOID R^2 value
1	C10	-0.0396	-0.0568	-0.0536	-0.5471
2	C100	0.1064	-0.0507	-0.0198	-0.0304
3	C500	0.5928	-0.0243	0.1146	0.0705
4	C1000	0.7802	0.0067	0.2661	0.1850
5	C2000	0.8767	0.0675	0.4810	0.3970
6	C3000	0.8956	0.1232	0.6370	0.5913

SVM regression hyper parameter c3000 and linear R^2 value 0.8956

3. Decision Tree Regression

S.NO	CRITERION	SPLITTER	R^2 VALUE
1	Squared_error	Best	0.9155
2	Friedman_mse	Best	0.9135
3	Absolute_error	Best	0.9498
4	Poisson	Best	0.9438
5	Squared_error	Random	0.9031
6	Friedman_mse	Random	0.5178
7	Absolute_error	Random	0.8764
8	Poisson	Random	0.8498

Decision tree regression -criterion Absolute_error and splitter best –Good Model for this particular scenario.

R^2 value is 0.9498

It is good Performance compare to both Multi linear and SVM