

To find following the machine learning regression method using in r2 value

1.MULTIPLE LINEAR REGRESSION (*R2 value*)=0.9358

2.SUPPORT VECTOR MACHINE:

S.NO	HYPER PARAMETER	RBF (NON LINEAR) (r value)	POLY (r value)	SIGMOID (r value)
1	C10	-0.0594	-0.0536	-0.0547
2	C100	-0.0507	-0.0198	-0.0304
3	C500	-0.0243	0.1146	0.0705
4	C1000	0.0067	0.2661	0.1850
5	C2000	0.0675	0.4810	0.3970
6	C3000	0.1232	0.6370	0.5913

The SVM Regression use *r2 value* (poly and hyper parameter (c3000)) = 0.6370

DECISION TREE:

S.NO	CRITERION	SPLITTER	R2 VALUE
1	friedman_mse	best	0.9076
2	friedman_mse	random	0.8907
3	squared_error	best	0.9443
4	squared_error	random	0.8986
5	absolute_error	best	0.9498
6	absolute_error	random	0.7890
7	poisson	best	0.9306
8	poisson	random	0.4594

The Decision Tree Regression use *r2 value* ( absolute\_error,best) = 0.9498