

To find the following the Machine learning Regression Method using R^2 value

1. Multiple Linear Regression (R^2 -value) = 0.9358680970046241

2. Support vector Machine (R^2 -value)

S.NO	HYPER PARAMETER VALUE(C)	LINEAR VALUE (R) VALUE	RBF(non-linear value R)	POLY (R)	SIGMOID(R)
1	C=10	-0.039644947	-0.056807593	-0.053667205	-0.054719583
2	C=100	0.1064681	-0.050726022	-0.019802139	-0.030453515
3	C=500	0.106468196	-0.024323348	0.114684807	0.070572145
4	C=1000	0.7802839	0.00676834	0.266163709	0.18506862
5	C=1500	0.8568553	0.03776049	0.387513014	0.294904916

Support vector Machine R^2 [linear and Hyperparameter(1500)] = 0.8568553

DECESION TREE (R^2 -value)				
S.NO	CRITERION	MAX FEATUREAS	SPLITER	R VALUE
1	Mse	Auto	Best	0.94257587
2	Mse	Auto	Random	0.83851074
3	Mse	Sqrt	Best	0.77582903
4	Mse	Sqrt	Random	0.663143105
5	Mse	log2	Best	0.411698765
6	Mse	log2	Random	0.508992181
7	Mae	auto	Best	0.952441757
8	Mae	auto	Random	0.841082496
9	Mae	Sqrt	Best	0.649506433
10	Mae	Sqrt	Random	0.878983845
11	Mae	log2	Best	-0.087439893
12	Mae	log2	Random	0.734816544
13	friedman_mse	auto	Best	0.90391628
14	friedman_mse	auto	Random	0.674939574
15	friedman_mse	Sqrt	Best	0.953988741
16	friedman_mse	Sqrt	Random	0.527560853
17	friedman_mse	log2	Best	0.535439998
18	friedman_mse	log2	Random	0.716257467

DECESION TREE (R^2 -value)[friedman_mse,sqrt,best] = 0.953988741