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

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

2.SUPPORT VECTOR MACHINE:

SVM accuracy value for Hyperparameter, linear, rbf, poly, Sigmoid

SL.NO	Hyper parameter	Linear	Non-linear(rbf)	poly	sigmoid
1	**C10**	-2.4372	-0.0558	-0.0576	-0.0574
2	**C100**	-357.0795	-0.0302	-0.0587	-0.0574
3	**C500**	-89996.8606	0.0500	-0.0640	-0.0574
4	**C1000**		0.1606	-0.0707	-0.0574
5	**C2000**		0.2883	-0.0845	-0.0574
6	**C3000**		0.3951	-0.0989	-0.0574

The **svm Regression** use **R2 value**(non-linear(rbf) and hyper parameter(C3000)) =**0.3951**

3.DECISION TREE:

SL.NO	CRITERION	SPLITTER	MAX FEATURES	R VALUE
1	Squared error	Best	sqrt	0.7207
2	Squared error	Best	Log2	-0.2836
3	Squared error	Random	sqrt	-0.4637
4	Squared error	Random	Log2	0.2376
5	Friedman mse	Best	sqrt	0.4698
6	Friedman mse	Best	Log2	0.6376
7	Friedman mse	Random	sqrt	0.7592
8	Friedman mse	Random	Log2	-0.0929
9	Absolute error	Best	sqrt	0.0882
10	Absolute error	Best	Log2	0.7633
11	Absolute error	Random	sqrt	-0.5088
12	Absolute error	Random	Log2	-0.7154
13	Poisson	Best	sqrt	-0.3673
14	Poisson	Best	Log2	0.4990
15	Poisson	Random	sqrt	0.4184
16	Poisson	Random	Log2	0.08429

The **DECISION tree** regression use **R2** value (absolute error, best,log2) =**0.7633**