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

1.Multiple Linear Regression:

R2 Value = 1.0

2. Support Vector Machine:

S.NO	Hyper Parameter	Linear (r value)	RBF(Non-Linear) (r value)	Poly (r value)	Sigmoid (r value)
1	C10	-0.0047	-0.0068	-0.0068	-0.0066
2	C100	0.0146	-0.0057	-0.0054	-0.0042
3	C500	0.0987	-0.0009	0.0006	0.0065
4	C1000	0.1983	0.0051	0.0081	0.0200
5	C2000	0.3793	0.0171	0.0230	0.0466
6	C3000	0.5358	0.0290	0.0378	0.0728

The **SVM Regression** use R2 value (Linear and hyper parameter(C3000)) = 0.5358

3. Decision Tree:

S.NO	CRITERION	MAX FEATURES	SPLITTER	R VALUE
1	**squared_error**	Sqrt	Best	0.9814
2	**squared_error**	log2	random	0.9688
3	**friedman_mse**	Sqrt	Best	0.9716
4	**friedman_mse**	log2	random	0.9744
5	**absolute_error**	Sqrt	Best	0.9763
6	**absolute_error**	log2	Random	0.9763
7	**poisson**	Sqrt	Best	0.9735
8	**poisson**	log2	random	0.9693
9	**squared_error**	Sqrt	random	0.9619
10	**squared_error**	log2	best	0.9735
11	**friedman_mse**	Log2	Best	0.9721
12	**friedman_mse**	Sqrt	random	0.9786
13	**absolute_error**	Log2	Best	0.9874
14	**absolute_error**	Sqrt	Random	0.9712
15	**poisson**	Log2	Best	0.9679
16	**poisson**	Sqrt	random	0.9744
17				
18				

The **Decision tree Regression** use **R2 value (absolute_error, log2, best) = 0.9874**