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

1. **Multiple Linear Regression:**
   a. R2 value is 0.9358680970046243

2. **Support Vector Machine:**

S.No	Hyper Parameter	Linear (r Value)	Poly	Rbf	sigmoid
1	C10	-0.03964	-0.0536	-0.05680	-0.0547
2	C100	0.1064	-0.0198	-0.0507	-0.0304
3	C500	0.5928	0.1146	-0.0243	0.0705
4	C1000	0.7802	0.2661	0.0067	0.1850
5	C2000	0.8767	0.4810	0.0675	0.3970
6	C3000	0.8956	0.6370	0.1232	0.5913

The **SVM Regression** use R2 value Linear , and hyper parameter C3000=0.8956

3. **Decision Tree:**

S.No	CRITERION	MAX_FEATURES	SPLITTER	R VALUE
1	*squared_error*	None	Best	0.9129
2	*squared_error*	None	random	0.4943
3	*Squared_error*	sqrt	Best	0.6709
4	*Squared_error*	Sqrt	Random	0.6643
5	*Squared_error*	Log2	Best	0.5125
6	*Squared_error*	Log2	Random	0.39129
7	*friedman_mse*	None	Best	0.9322
8	*friedman_mse*	None	Random	0.8039
9	*friedman_mse*	sqrt	Best	0.6751
10	*friedman_mse*	sqrt	Random	0.8180
11	*friedman_mse*	Log2	Best	0.8591
12	*friedman_mse*	Log2	Random	0.7185
13	*absolute_error*	None	Best	0.93219
14	*absolute_error*	None	Random	0.6641
15	*absolute_error*	sqrt	Best	0.7112
16	*absolute_error*	sqrt	Random	-0.3353
17	*absolute_error*	Log2	Best	0.76156
18	*absolute_error*	Log2	Random	0.3611
19	*poisson*	None	Best	0.9192
20	*poisson*	None	Random	0.8626
21	*poisson*	sqrt	Best	0.5010
22	*poisson*	sqrt	Random	0.3979
23	*poisson*	Log2	Best	0.6919
24	*poisson*	Log2	Random	0.6803