The following steps are performed to calculate **R^2** value in the machine learning regression method.

1. Multiple Linear Regression:

   R^2 value = 0.93586

2. Support Vector Machine Regression:

S. NO	Hyper Parameter	**Liner** (r value)	Hyper Parameter	**RBF** (r value)
1	C10	-0.03964	C10	-0.05680
2	C100	0.10646	C100	-0.05072
3	C900	0.75704	C900	0.00053
4	C1000	0.78028	C1000	0.00676
5	C10000	0.92399	C10000	0.37189
6	C100000	0.93012	C100000	0.70856
7	C1000000	0.93012	C150000	0.74140
8	C100000000	0.93055	C160000	0.74378
9	C10000000000	0.93632	C160000	0.74753
10	C19999999960	0.94400	C200000	0.74776
11	C100000000000	-1.73594	C300000	0.74778

S. NO	Hyper Parameter	**POL** (r value)	Hyper Parameter	**SIGMOID** (r value)
1	C10	-0.05366	C10	-0.05471
2	C100	-0.01980	C100	-0.03045
3	C200	0.01568	C1000	0.18506
4	C800	0.20943	C2000	0.39706
5	C1000	0.26616	C4000	0.62823
6	C2000	0.48100	C5000	0.73065
7	C3000	0.63700	C6000	0.79724
8	C4000	0.73263	C7000	0.82596
9	C5000	0.79365	C8000	0.83651
10	C6500	0.82699	C9500	0.83887
11	C7000	0.82987	C10000	0.85353

The best model for SVM is a linear model with the hyperparameter C set to 1,999,999,999,960 resulting in an R^2 score of 0.9440

3. Decision Tree:

S. No	Criterion	Max Features	Splitter	R Value
1	Squared_error (mse)	Auto	Best	0.9232
2	Squared_error (mse)	Auto	Random	0.8791
3	Squared_error (mse)	Sqrt	Best	0.3111
4	Squared_error (mse)	Sqrt	Random	0.8109
5	Squared_error (mse)	Log2	Best	0.7030
6	Squared_error (mse)	Log2	Random	0.6578
7	Absolute_error (mae)	Auto	Best	0.9533
8	Absolute_error (mae)	Auto	Random	0.8901
9	Absolute_error (mae)	Sqrt	Best	0.8744
10	Absolute_error (mae)	Sqrt	Random	0.9158
11	Absolute_error (mae)	Log2	Best	-0.4674
12	Absolute_error (mae)	Log2	Random	0.2861
13	Friedman_mse	Auto	Best	0.8999
14	Friedman_mse	Auto	Random	0.8923
15	Friedman_mse	Sqrt	Best	0.7553
16	Friedman_mse	Sqrt	Random	0.5381
17	Friedman_mse	Log2	Best	0.2045
18	Friedman_mse	Log2	Random	0.4640

The decision tree regression model with mae criterion, auto max features, and best splitter achieves an R^2 value of 0.9533

I would recommend the Decision Tree Regression model as the best choice, given its high R2 value of 0.9533.