

1. Multiple Linear Regression (r2 Value) = 0.9358
2. Support Vector Machine:

S.No	Hyper Parameter	Linear r Value	RBF(Non-Linear) r Value	Poly r Value	Sigmoid r Value
1	C10	-0.0396	-0.056807	-0.05366	-0.05472
2	C100	0.1065	-0.05073	-0.01980	-0.03045
3	C1000	0.7803	0.006768	0.2662	0.18506
4	C3000	0.8957	0.1232	0.63701	0.5914
5	C5000	0.9004	0.2124	0.7936	0.7307
6	C10000	0.9240	0.3719	0.8130	0.8536

The SVM Regression: r Value (by using 'Linear', Hyper Parameter(C=10000)) =0.9240

## Decision Tree

The Decision Tree Regression: r Value (by using Criterion: absolute\_error, Splitter: best) = 0.9656

S.No	Criterion	Max Features	Splitter	r Value
1	<b>absolute_error</b>	sqrt	best	0.4288
2	<b>absolute_error</b>	Log2	best	0.9364
3	<b>absolute_error</b>	1	best	0.9656
4	<b>absolute_error</b>	sqrt	random	0.7525
5	<b>absolute_error</b>	Log2	random	0.66632
6	<b>absolute_error</b>	-	random	0.7728
7	<b>poisson</b>	sqrt	best	0.693
8	<b>poisson</b>	Log2	best	0.7246
9	<b>poisson</b>	-	best	0.9146
10	<b>poisson</b>	sqrt	random	0.3308
11	<b>poisson</b>	Log2	random	0.4158
12	<b>poisson</b>	-	random	0.9040
13	<b>squared_error</b>	sqrt	best	0.5018
14	<b>squared_error</b>	Log2	best	0.9085
15	<b>squared_error</b>	-	best	0.9320
16	<b>squared_error</b>	sqrt	random	0.3218
17	<b>squared_error</b>	Log2	random	0.2844
18	<b>squared_error</b>	-	random	0.8283
19	Friedman_mse	sqrt	best	0.6862
20	Friedman_mse	Log2	best	0.3608
21	Friedman_mse	-	best	0.8939
22	Friedman_mse	sqrt	random	0.8557
23	Friedman_mse	Log2	random	0.6786
24	Friedman_mse	1	random	0.9058

