Decision Tree: Hyper Tuning Parameter

S.No	Criterion	Max Features	Splitter	R Squared Value
1	Squared error	auto	best	0.91
2	Squared error	sqrt	best	-0.75
3	Squared error	Log2	best	0.34
4	Squared error	auto	random	0.69
5	Squared error	sqrt	random	-0.49
6	Squared error	Log2	random	0.82
7	Friedman_mse	auto	best	0.92
8	Friedman_mse	sqrt	Best	0.089
9	Friedman_mse	Log2	best	0.61
10	Friedman_mse	auto	random	0.87
11	Friedman_mse	sqrt	random	0.75
12	Friedman_mse	Log2	random	-0.78
13	Absolute_error	auto	best	0.94
14	Absolute_error	sqrt	best	0.74
15	Absolute_error	Log2	best	0.78
16	Absolute_error	auto	random	0.90
17	Absolute_error	sqrt	random	0.43
18	Absolute_error	Log2	random	0.69
19	Poisson	auto	best	0.94
20	Poisson	sqrt	best	0.89
21	Poisson	Log2	best	0.51
22	Poisson	auto	random	0.78
23	Poisson	sqrt	random	0.28
24	Poisson	Log2	random	0.69

Below parameters has high R squared value, when compared to others.

Poisson	auto	best	0.94
Absolute_error	auto	best	0.94

Support Vector Machine Algorithm - Hyper tuning parameter

S.No	Kernel	C Value	R Squared Value
1	rbf	100	-0.05
2	rbf	1000	0.006
3	rbf	3000	0.12
4	rbf	6000	0.24
5	rbf	30000	0.58
6	rbf	60000	0.68
7	rbf	300000	0.74
8	poly	300000	-0.11
9	poly	30000	0.60
10	poly	3000	0.63
11	poly	1000	0.26
12	poly	100	-0.01
13	sigmoid	100	-0.03
14	sigmoid	1000	0.18
15	sigmoid	3000	0.59
16	sigmoid	30000	0.81
17	sigmoid	300000	-27.9
18	Linear	30000	0.93
19	Linear	3000	0.89
20	Linear	300	0.37
21	Linear	9000	0.92
22	Linear	90000	0.93
23	Linear	900000	0.93
24	Linear	700000	0.93

Kernel value ‘Linear ‘ and C= 30000 is having the high R squared value 0.93