

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

1. **MULTIPLE LINEAR REGRESSION** (R2 value) = 0.9346

2. **SUPPORT VECTOR MACHINE:**

S.No	Hyper Parameter (r score)	Linear (r score)	Rbf(Non-Linear) (r score)	Poly (r score)	Sigmoid (r score)
1.	C=10	-8844	-3621	-1907	-3635
2.	C=100	-89	-3600	-1845	-3655
3.	C=1000	0.47	-436	-13	-33
4.	C=3000	0.86	-42	-0.42	-0.99

3. **DECISION TREE:**

S.No	criterion	splitter	max_features	R Score
1.	squared_error	best	sqrt	0.1467
2.	squared_error	best	log2	0.6568
3.	squared_error	random	sqrt	0.8417
4.	squared_error	random	log2	0.5763
5.	Friedman_mse	best	sqrt	-0.7116
6.	Friedman_mse	best	log2	0.6662
7.	Friedman_mse	random	sqrt	0.5347
8.	Friedman_mse	random	log2	0.6034
9.	Absolute_error	best	sqrt	0.8650
10.	Absolute_error	best	log2	0.7404
11.	Absolute_error	random	sqrt	0.3864
12.	Absolute_error	random	log2	0.4796
13.	poisson	best	sqrt	0.6881
14.	poisson	best	log2	-2.7565
15.	poisson	random	sqrt	0.2213
16.	poisson	random	log2	0.1219
17.	squared_error	best	Default=none	0.9194
18.	squared_error	random	Default=none	0.9117
19.	Friedman_mse	best	Default=none	0.9094
20.	Friedman_mse	random	Default=none	0.8879
21.	poisson	best	Default=none	0.9207
22.	poisson	random	Default=none	0.9025