

**1.Decision Tree:**

S.NO	CRITERION	MAX Features	SPLITTER	R <sup>2</sup> VALUE
1	squared_error	none	best	0.8980
2	squared_error	none	random	0.7157
3	squared_error	sqrt	random	-0.0213
4	squared_error	sqrt	best	0.6635
5	squared_error	log2	best	0.7267
6	squared_error	log2	random	0.1787
7	friedman_mse	none	best	0.9023
8	friedman_mse	none	random	0.8753
9	friedman_mse	sqrt	random	0.3164
10	friedman_mse	sqrt	best	0.7363
11	friedman_mse	log2	best	0.3369
12	friedman_mse	log2	random	0.0078
13	absolute_error	None	best	0.9222
14	absolute_error	None	random	0.7901
15	absolute_error	sqrt	random	0.8410
16	absolute_error	sqrt	best	-1.107
17	absolute_error	log2	best	0.4365
18	absolute_error	log2	random	0.9079
19	poisson	None	best	0.9300
20	poisson	None	random	0.8493
21	poisson	sqrt	random	-0.0028
22	poisson	sqrt	best	0.8268
23	poisson	log2	best	0.3320
24	poisson	log2	random	-0.7886

**Decision Tree - Regression ,acceptable  $R^2$  value=0.9300**

**Used Parameters :(CRITERION: Poisson, max\_features:None , splitter:Best)**

**2.SVM:**

S.NO	Hyper Parameter	Linear $R^2$ value	Linear Unstandardize Dataset	Rbf $R^2$ value	Poly $R^2$ value	Sigmoid $R^2$ value
1	default=1.0	-0.0556	0.89507	-0.05741	-0.05710	-0.05720
2	C=0.01	-0.057	0.93353	-0.0574	-0.0574	-0.0574
3	C=0.10	-0.0573	0.93752	-0.0574	-0.05744	-0.0574
4	C=10	-0.0396	-2.4372	-0.0568	-0.0536	-0.0547

**SVM - Regression ,acceptable  $R^2$  value=0.93752**

**Used Parameters :(Kernel: Linear (unstandardize dataset), C=0.10)**