

**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)**