

## R2 Values For Regression Models

**Multiple Linear Regression:** 0.9358680970046243

**Decision Tree:** 0.9564406179218371 (Refer below table values)

(d) - default values

S.No	criterion	max_features	splitter	R Value	Error
1	squared_error (d)	None (d)	best (d)	0.9262472434774368	
2	squared_error	None	random	0.7275056007145746	
3	squared_error	sqrt	best	0.5465208287995236	
4	squared_error	sqrt	random	0.5435391514964036	
5	squared_error	log2	best	0.46823977641516723	
6	squared_error	log2	random	0.8119731729904649	
7	friedman_mse	None (after getting the error then removing this parameter. So here its <b>empty</b> )	best	Error	The 'max_features' parameter of DecisionTreeRegressor must be an int in the range [1, inf), a float in the range (0.0, 1.0], a str among {'sqrt', 'log2'} or None. Got 'none' instead.  => Max_features not added as parameter
8	friedman_mse	empty	random	Error	Same Error Above Mentioned
9	friedman_mse	sqrt	best	0.4616067902012668	
10	friedman_mse	sqrt	random	-0.4606770249607932	
11	friedman_mse	log2	best	-0.9827573557616756	
12	friedman_mse	log2	random	0.561585220204009	
13	absolute_error	<b>empty</b>	best	0.9564406179218371	Max_features not added as parameter
14	absolute_error	<b>empty</b>	random	0.8711801004146418	Max_features not added as parameter
15	absolute_error	sqrt	best	-0.38413896597537667	
16	absolute_error	sqrt	random	0.44906505649329287	

17	absolute_error	log2	best	0.7489841645812567	
18	absolute_error	log2	random	-0.22537599799187413	
19	poisson	<b>empty</b>	best	0.9190802289032468	Max_features not added as parameter
20	poisson	<b>empty</b>	random	0.8452100196096501	Max_features not added as parameter
21	poisson	sqrt	best	-0.5391091285839957	
22	poisson	sqrt	random	0.7477438778751855	
23	poisson	log2	best	0.9562030668634889	
24	poisson	log2	random	0.34209521592392433	