

Decision Tree :

If parameters are not passed then r_score value is 0.92

SL.NO	criterion	splitter	max_features	R_score
1	squared_error	Best	None	0.9189
2	squared_error	Random	None	0.7521
3	squared_error	Random	Sqrt	0.4360
4	squared_error	Random	Log2	-0.8267
5	squared_error	Best	Log2	0.7460
6	squared_error	Best	Sqrt	0.6717
7	friedman_mse	Best	Sqrt	0.7008
8	friedman_mse	Random	Sqrt	0.8750
9	friedman_mse	Random	Log2	0.5561
10	friedman_mse	Best	Log2	0.3396
11	friedman_mse	Best	None	0.9177
12	friedman_mse	Random	None	0.8594
13	absolute_error	Random	None	0.8259
14	absolute_error	Best	None	0.9704
15	absolute_error	Best	Log2	0.7434
16	absolute_error	Random	Log2	0.8749
17	absolute_error	Random	Sqrt	0.6981
18	absolute_error	Best	Sqrt	0.9338
19	Poisson	Best	Sqrt	0.8063
20	Poisson	Random	Sqrt	-0.8680
21	Poisson	Random	Log2	0.5672
22	Poisson	Best	Log2	0.8993
23	Poisson	Best	None	0.9260
24	Poisson	Random	None	0.5664

Among the above options "DecisionTreeRegressor(criterion="absolute_error",splitter="best")" is the best model and r_score value is 0.9704