

Finding the best ML model using R2 value by Decision Tree

critierion	splitter	max_features	R Value
squared_error	random	None	0.9237
squared_error	best	None	0.9081
squared_error	random	sqrt	0.5273
squared_error	best	sqrt	0.1855
squared_error	random	log2	0.5734
squared_error	best	log2	0.6818
friedman_mse	random	None	0.7581
friedman_mse	best	None	0.9165
friedman_mse	random	sqrt	-0.7164
friedman_mse	best	sqrt	0.0376
friedman_mse	random	log2	0.7771
friedman_mse	best	log2	0.5766
absolute_error	random	None	0.6637
absolute_error	best	None	0.9389
absolute_error	random	sqrt	0.6246
absolute_error	best	sqrt	0.8916
absolute_error	random	log2	0.6792
absolute_error	best	log2	0.7194
poisson	random	None	0.8143
poisson	best	None	0.9178
poisson	random	sqrt	-0.6189
poisson	best	sqrt	0.2891
poisson	random	log2	0.5414
poisson	best	log2	0.7192

As by using these 3 parameter the R value not crossed 0.95. So trying with other parameter

critierion	splitter	min_samples_split	R Value
squared_error	random	2	0.8693
friedman_mse	random	2	0.7791
absolute_error	random	2	0.7414
poisson	random	2	0.8826
squared_error	best	2	0.9054
friedman_mse	best	2	0.9039
absolute_error	best	2	0.9621
poisson	best	2	0.9296