

Finding Best SVM Module using R2 value

R2 will change depends up on various hyper tuning parameter

	kernel	C	coef0	degree	gamma	R2 value
	<i>linear</i>	1000				0.92
	<i>poly</i>	1000				0.81
	<i>rbf</i>	1000				0.37
	<i>sigmoid</i>	1000				0.85
	<i>sigmoid</i>	1000	0.5			0.75
	<i>poly</i>	1000		3		0.81
	<i>poly</i>	1000		1		0.87
	<i>poly</i>	1000		1	<i>scale</i>	0.87
	<i>poly</i>	1000		1	<i>auto</i>	0.87
	<i>linear</i>	2000				0.93

We got high r2 value for kernel=linear and C=2000 parameter,so this will be the best model

Finding Best Decision Tree Module using R2 value

R2 will change depends up on various hyper tuning parameter

criterion	splitter	max_depth	min_samples_split	ccp_alpha	random_state	R2 value
<i>squared_error</i>						0.91
<i>squared_error</i>	best	<i>None</i>	2	0.0	None	0.91

squared_error	random	50	5	0.5	10	0.89
friedman_mse						0.90
friedman_mse	best	None	2	0.0	None	0.921
friedman_mse	random	50	5	0.5	10	0.89
absolute_error						0.96
absolute_error	best	None	2	0.0	None	0.928
absolute_error	random	50	5	0.5	10	0.83
poisson						0.93
poisson	best	None	2	0.0	None	0.925
poisson	random	50	5	0.5	10	0.89

We got high r2 value for the hyper tuning parameter criterion=absolute_error