Multi Linear Regression:

R_score value is 0.78

1.SVM – Support Vector Machine

Kernel	*C*	*R_score*
linear	0 10 100 1000 10000	-0.01 0.46 0.62 0.76 0.74
rbf	0 10 100 1000 10000	-0.08 -0.03 0.32 0.81 0.870
poly	0 10 100 1000 10000	-0.07 0.03 0.61 0.85 0.85
sigmoid	0 10 100 1000 10000	-0.07 0.03 0.52 0.28 -34.15

Hyper tuning parameter in SVM is kernel=”rbf”,c=10000 for given dataset

2. Decision Tree

criterion	*splitter*	*R_score*
squared_error (default)	best(default)	0.69
	Random	0.74
friedman_mse	best	0.69
	Random	0.68
absolute_error	best	0.67
	Random	0.72
poisson	best	0.72
	Random	0.71

Hyper tuning parameter in Decision tree is criterion =” squared_error”, splitter=random for given dataset

3. Random Forest

criterion	*max_features*	*R_score*
squared_error	sqrt	0.872
	log2	0.866
friedman_mse	sqrt	0.862
	Log2	0.871
absolute_error	Sqrt	0.870
	Log2	0.871
poisson	Sqrt	0.871
	Log2	0.870

Hyper tuning parameter in Decision tree is criterion =”squared_error”, max_features=sqrt for given dataset

By analysing the above hyper tuning report **RandomForest** given **high** accuracy when compared to the other model for the given data set.
So we **saving RandomForest model** for the deployment