REGRESSOR ASSIGNMENT USING ML

1. Problem Statement: ML , Regressor, supervised Learning

2. Total no of columns:6

   Total no of rows:1338

3. Preprocessing using one-code encoding to convert nominal data

Machine Learning:

r value: 0.78

SVM:

SL.No	Sigmoid	Linear	rbf
	-0.07	-0.01	-0.08

Decision Tree:

SL.No	CRITERION	SPLITTER	R VALUE	
1	friedman_mse	best	0.69	
2	absolute_error	best	0.66	
3	squared_error	best	0.69	
4	poisson	best	0.70	
5	friedman_mse	random	0.75	
6	absolute_error	random	0.72	
7	poisson	random	0.74	
8	squared_error	random	0.72	

Random Forest:

SL.No	Parameter	CRITERION		R VALUE
1	n_estimators= 50		random_state= 0	0.84
2		squared_error	random_state= 0	0.85

3		absolute_error	random_state= 0	0.85
4		friedman_mse	random_state= 0	0.85
5		poisson	random_state= 0	0.85
6		squared_error	sqrt	0.87
7		absolute_error	sqrt	0.87
8		friedman_mse	sqrt	0.86
9		poisson	sqrt	0.87
10		squared_error	log2	0.87
11		absolute_error	log2	0.87
12		friedman_mse	log2	0.87
13		poisson	log2	0.87

I am choosing Random forest since i get 0.87 using the above parameters