

To find the following the machine learning regression method using in r2 value.

1. Multiple Linear Regression r_score Value = 0.7894790349867009
2. Support Vector Machine.

kernel	r_score
poly	-0.075699656
linear	-0.010102665
sigmoid	-0.075429243
rbf	-0.083382386

SVM Regression r_score Value = -0.083382386

3. Decision Tree

criterion	splitter	max_features	r_score
friedman_mse	random	auto	0.717667665469601
'friedman_mse	best	auto	0.692540932649487
absolute_error	random	auto	0.709650458512796
absolute_error	best	auto	0.671424024
poisson	best	auto	0.657090389
poisson	random	auto	0.590351005
absolute_error	best	auto	0.708424018

Decision Tree Regression r_score Value = 0.744987392

4. Random Forest Regressor

criterion	n_estimators	r_score
absolute_error	50	0.852902776
absolute_error	100	0.852146895
friedman_mse	50	0.849997997
friedman_mse	100	0.854005131
poisson	50	0.827954545
poisson	100	0.833210117
squared_error	50	0.84988238
squared_error	100	0.853923579

Random Forest Regression r_score Value = 0.854005131

The Final Machine learning best model of regression

Random Forest r_score Value = 0.854005131