2018AIML600

# Linear Regression Analysis for degree = 10.

RMSE Value for degree = 10 on training data 1.3787128182156518

RMSE Value for degree = 10 on testing data 1.8179719053969672

# Lasso Regression Analysis for degree = 10

RMSE Value for degree = 10 on training data 1.4229160939434955

RMSE Value for degree = 10 on testing data 1.5069888304194958

# Ridge Regression Analysis for degree = 10

RMSE Value for degree = 10 on training data 1.8255136884539345

RMSE Value for degree = 10 on testing data 1.6883720121889747

By above analyse, we can see that Linear Regression Model works well on training datasets as it has a low variance over there, lasso regression model and ridge regression models works well with training sets. Thus, they avoid overfittings.