

Practice assignment

Linear Regression

All data files referenced in this assignment are in the Jigsaw lab at:

C:\Data Science with R\Assignments\Non Graded Assignments\Topic9 Linear Regression

(Please note that you will need to save all your work in C drive in your user folder)

Objective

To predict the Housing prices in the suburbs of Boston as a function of the different attributes

Please refer to the data dictionary to get a better understanding of the variables.

Details

Location: C:\Data Science R\Assignments\Non Graded Assignments\Topic 9 Linear Regression

Data Dictionary : *Boston Housing Prices Data Dictionary.csv*

Data set : *boston_prices.csv*

Following are some steps to be followed

- **Data Preparation** : Understand summaries of the data, clean the data- missing value treatment, outlier treatment, create new variables, dummy variables, etc.
- **Data Profiling**: Understand the relationship between every IDV and DV (Using Correlations, visualisations, etc.)
- **Build a Linear Regression model using IDV's that have good correlation with the DV**. Your goal will be to create a model that best explains or predicts price
- **Evaluate the model performance and validate the model**. Generate residual plots and actual Vs. predicted plots in Excel