**PERFORMANCE AND KEY INSIGHTS FOR LINEAR REGRESSION**

* Approached train and features data set to perform the linear regression model.
* Merged two data set to create the logistic regression.
* Funded the NA values and filled with the 0.
* Described the data set to find the basic statistic values.
* Performed correlation to find the relationship between dependent and independent variable.
* Performed Histogram to check the data distribution
* Done transformation for data normalization.
* Defined the x and y values to perform linear regression model.
* Performed the linear regression and predicted the sales values based on the data.
* Defined the coefficients and intercept value to form the linear regression equation
* Intercept value = 15981.25812346704
* Coefficient = ([ 732.68922772, 241.12834133, 849.52189859, -30.800794,819.65077685, -533.0494106])
* Linear regression = {Sales = 15981+732\*(ad\_data["MarkDown1"])+241\*(ad\_data["MarkDown2"])+849\*(ad\_data["MarkDown3"])-30\*(ad\_data["MarkDown4"])+819\*(ad\_data["MarkDown5"])-533\*(ad\_data["CPI"])}