Linear Regression

For used car market in UK

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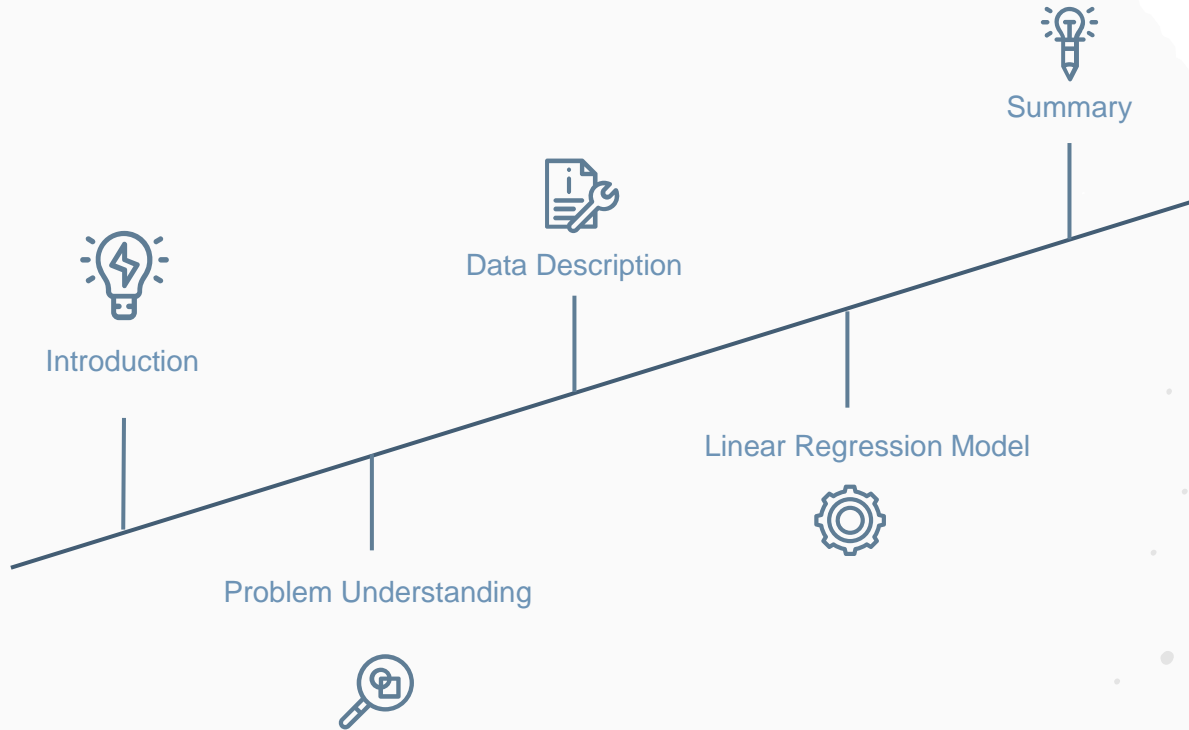
Introduction :

❖ Cars are one of the most important necessities for every family, as they are the most popular means of transportation these days.

❖ Use the predict to help us to figure out the UK used car market, and the data was collected from Kaggle.

Problem Statement :

This project aims to Predict the prices of used cars market in the UK, by engine size, and car model, type of transmissions etc, by linear regression.

Data Description :

Our data set is about most common cars brand in UK, and it contain two brands Ford and Volkswagen

The data set is provided in .csv format, contains information of price, transmission, model, mileage, year, engine size, mpg, fuel type.
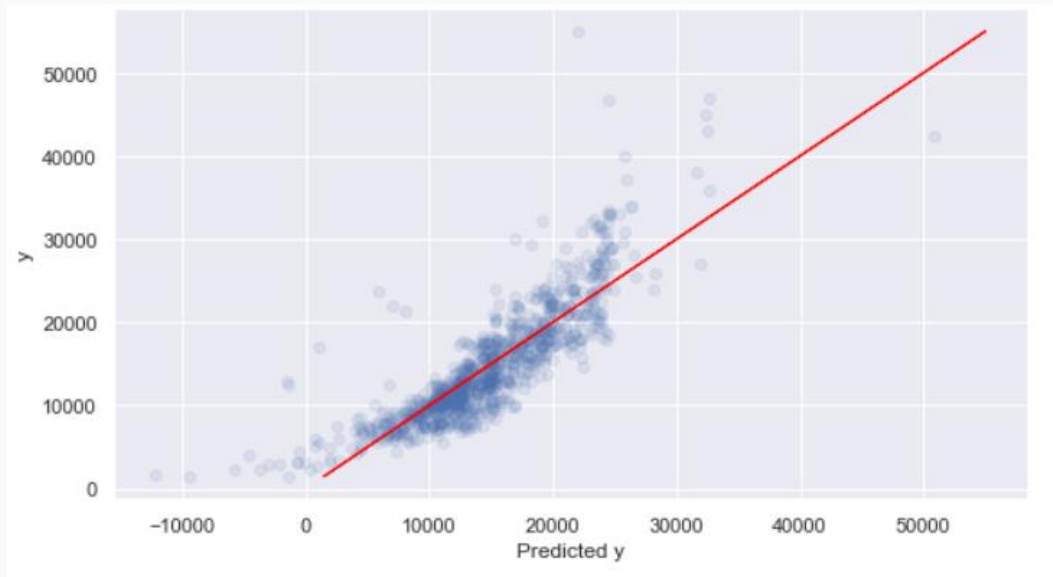
Our data contains thirty-three thousand of rows and 8 columns of information of used Cars.

Linear Regression Model :

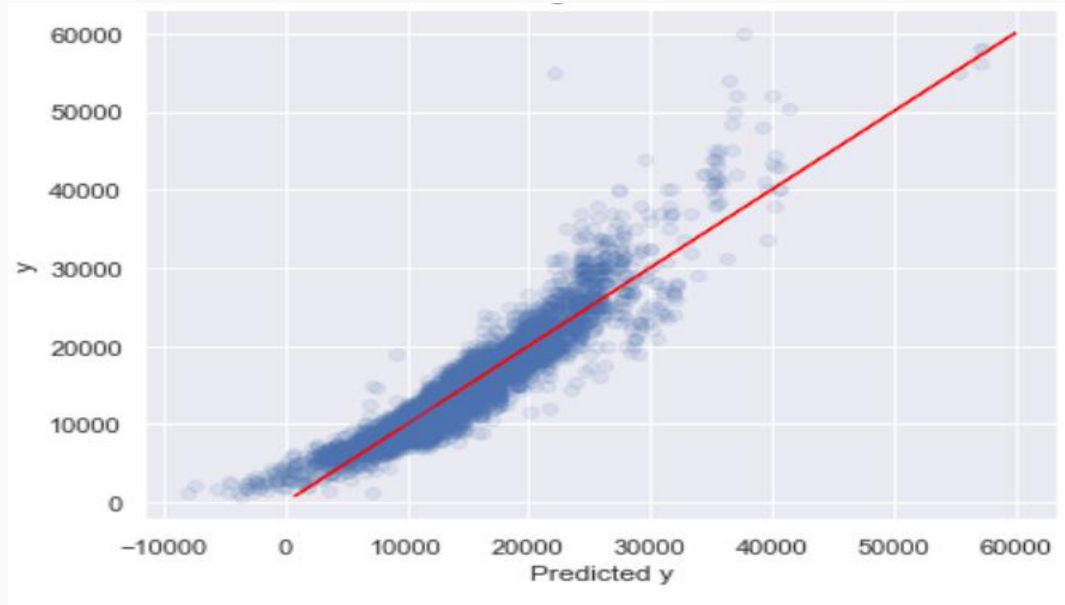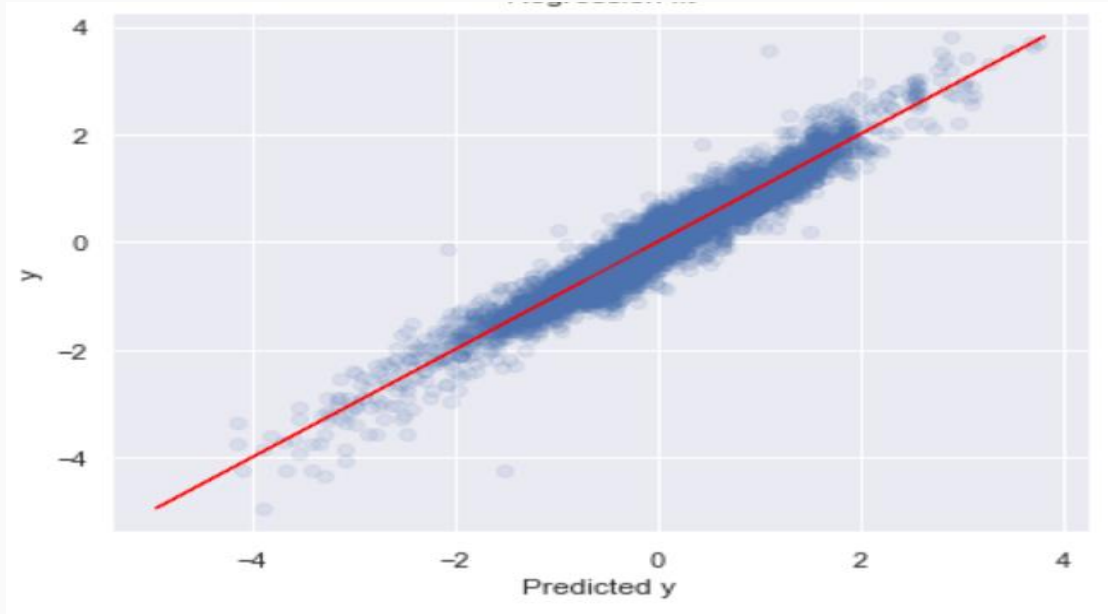| Exp	Train	Val	Test
Baseline	75.21%	73.65%	74.11%
Dummy	88.30%	88.11%	87.95%
Log	92.45%	92.36%	92.21%
Coxbox	92.57%	92.37%	92.37%
STD	92.57%	92.38%	90.52%

Linear Regression Model :

Baseline model plot

Linear Regression Model :

Dummy model plot

Linear Regression Model :

Coxbox model plot

Summary

The model is improved after using the **Dummy Variable** function.

We find The best model is **Coxbox Model.**

So , our model ready to predict the prices of used car.

THANKS !

Any questions?