

CAR PRICE

REGRESSION

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INTRODUCTION

- With the technological development, cars have become a necessity for the majority of people.
- This linear regression project aims to predict the prices of the cars in the future based on the most important characteristics that affect its value in the market.

PROBLEM STATEMENT

- What is the effect of features on cars prices ?

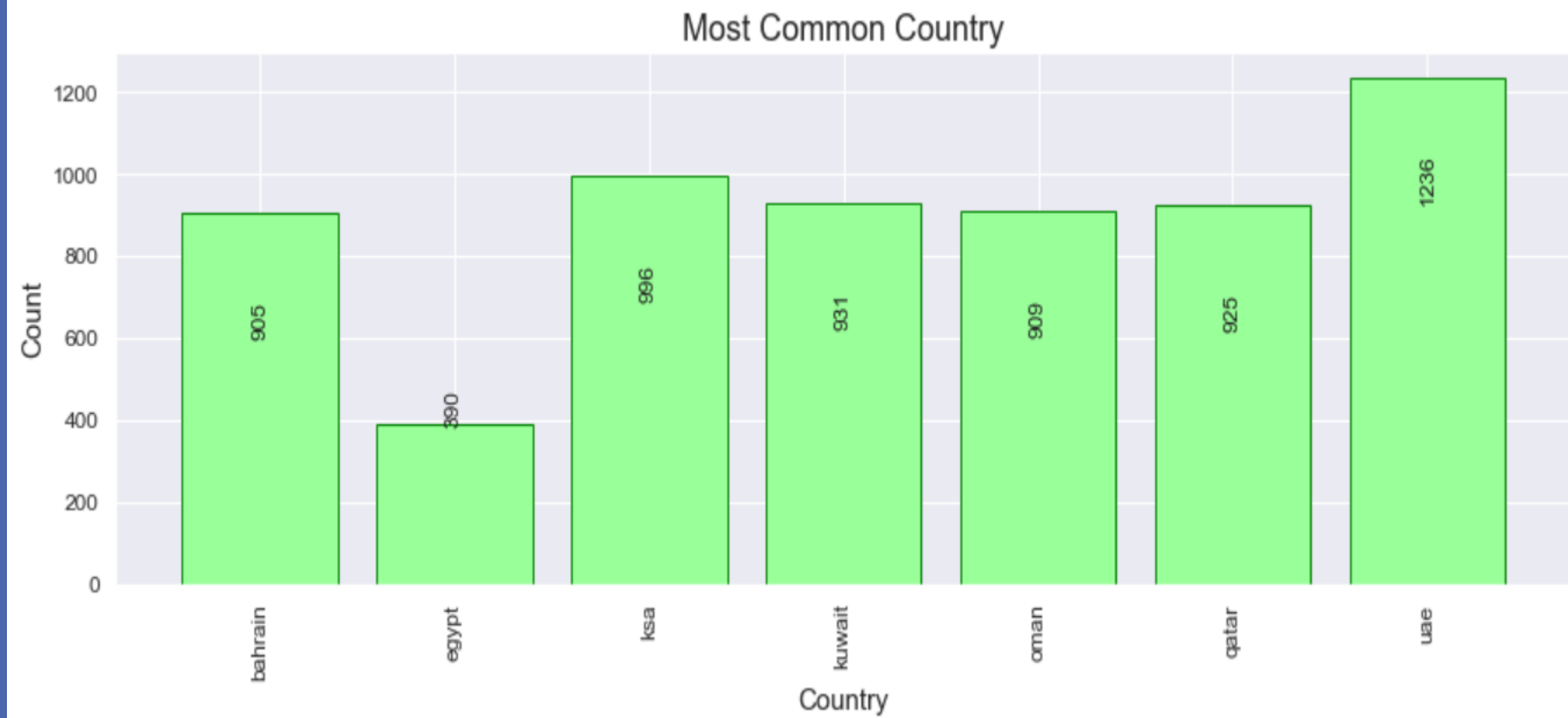
•OBJECTIVE

- Predict cars prices Based on specific cars features.

DATA SET

- The data to be tested in this project are scraped from yallamotor.com/ar
- 6308 rows & 9 columns

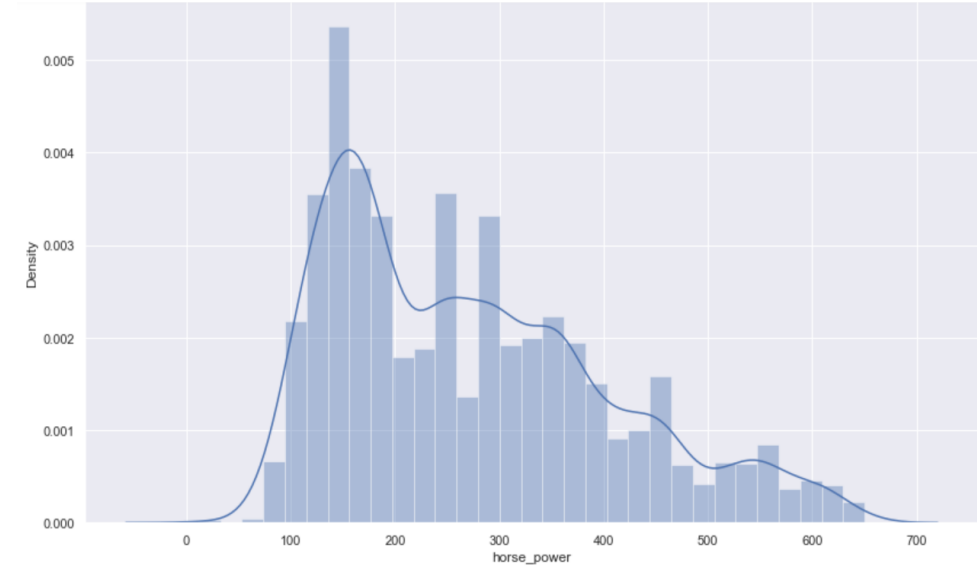
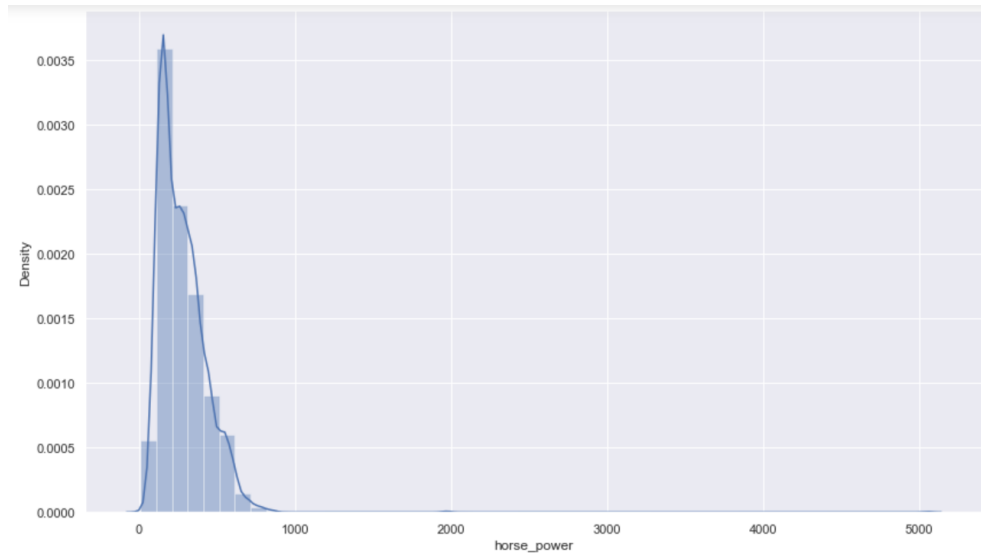
Data Cleaning & Visualization



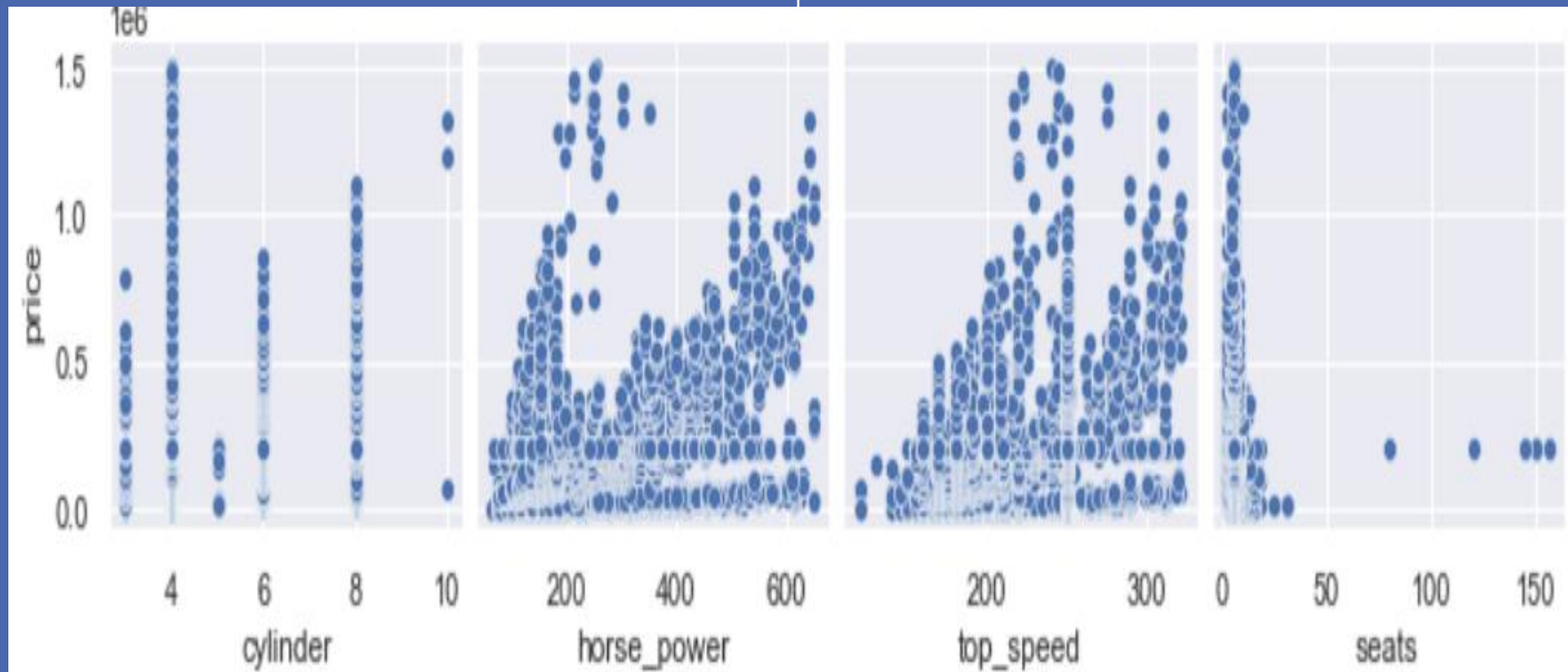
Common Brand In Each Country



Dealing with Outliers



The Relation Between Features and Targets



Tools

- **Pandas**
- **NumPy**
- **Matplotlib**
- **Seaborn**
- **Scikit-learn**
- **Math library**

Tested Machine Learning Algorithms

Model	R ² Train	R ² Test
Linear Regression	0.822	-1.397
Decision tree regressor	0.464	0.512
Lasso Regression	0.807	0.817
Ridge Regression	0.822	0.588

The best model **Lasso Regression** is then **Ridge Regression**

THANKS
