Diamonds Price Predict

By
Fawzia Alsubaie
Deem Alshammri

Instructor
Dr. Mejdal Alqahtani

Introduction

Our goal from this project is to perform a regression model to predict the price.

Dataset

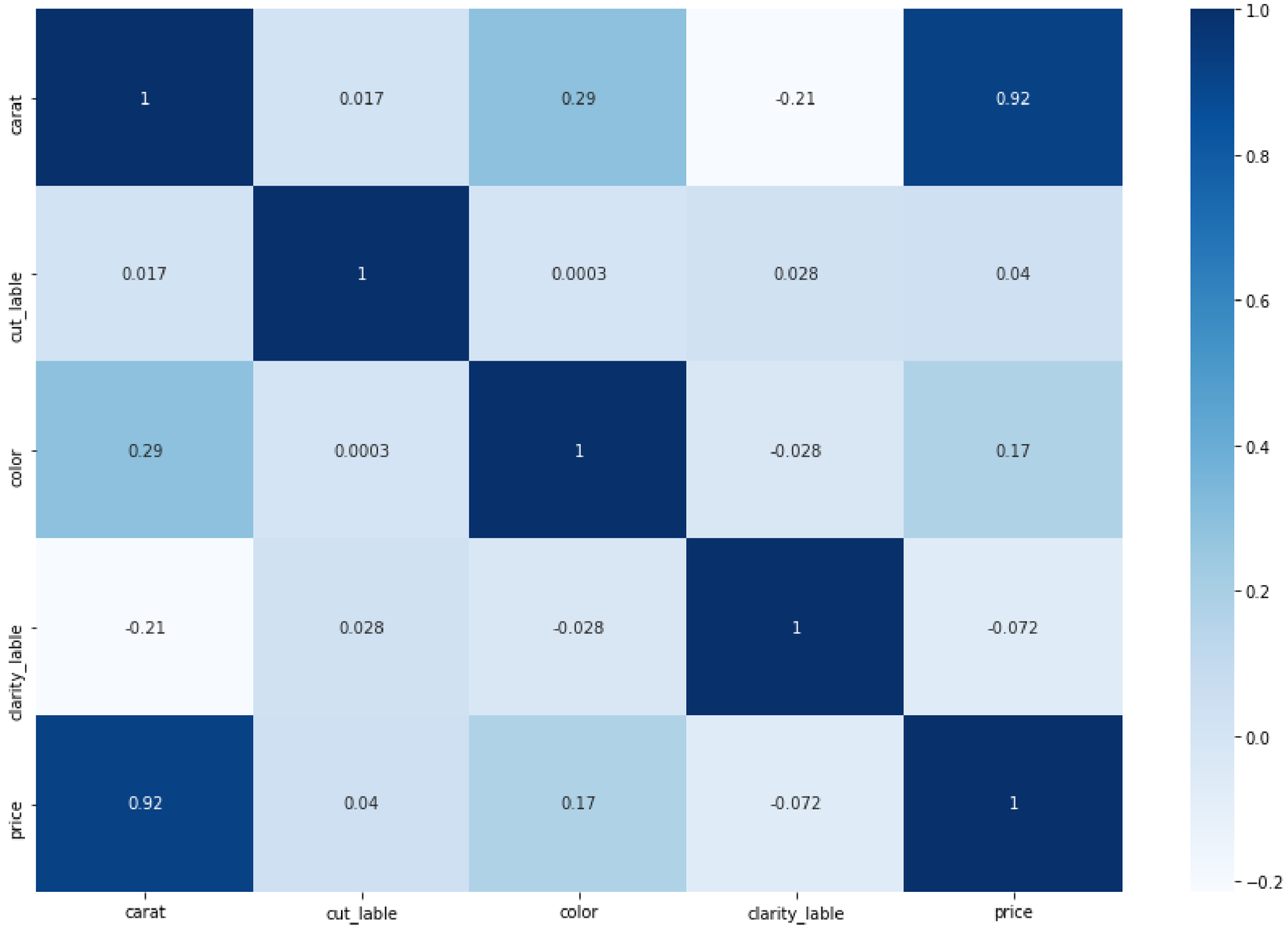
This dataset contains of 10 variables such as Carat, Price, Cut, Color, Clarity, depth and Table with 53940 rows.

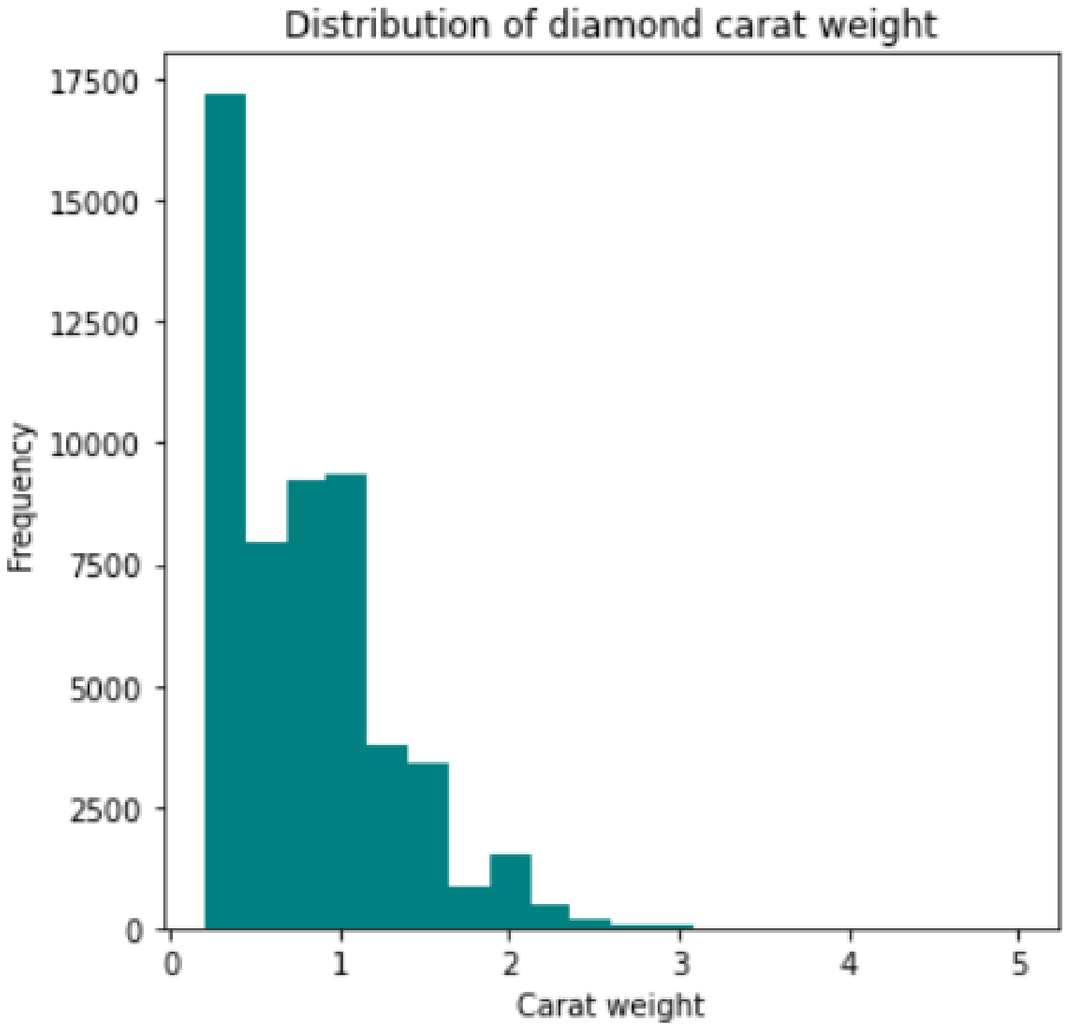
Clean

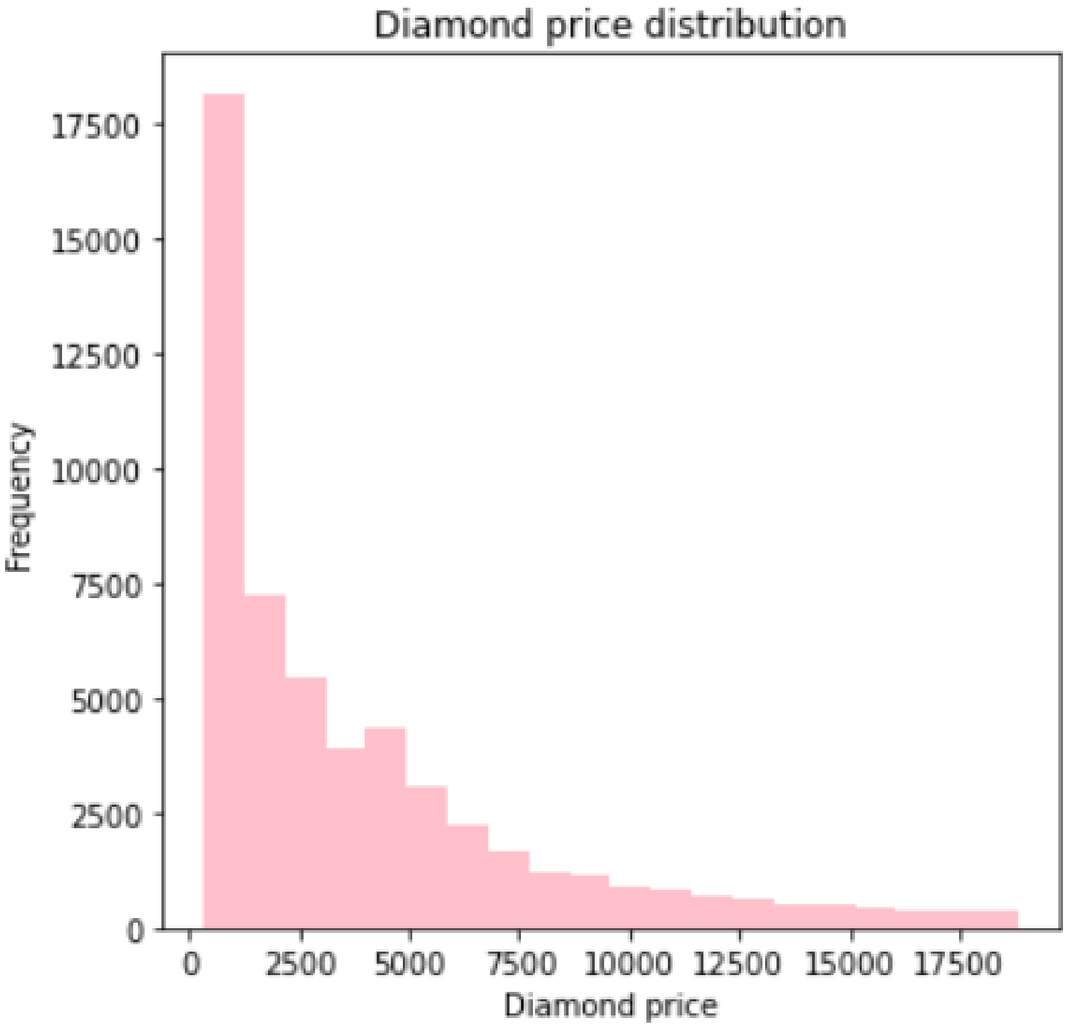
- Drop some columns we don't need in our model training.
- Convert Price feature type from int to float.

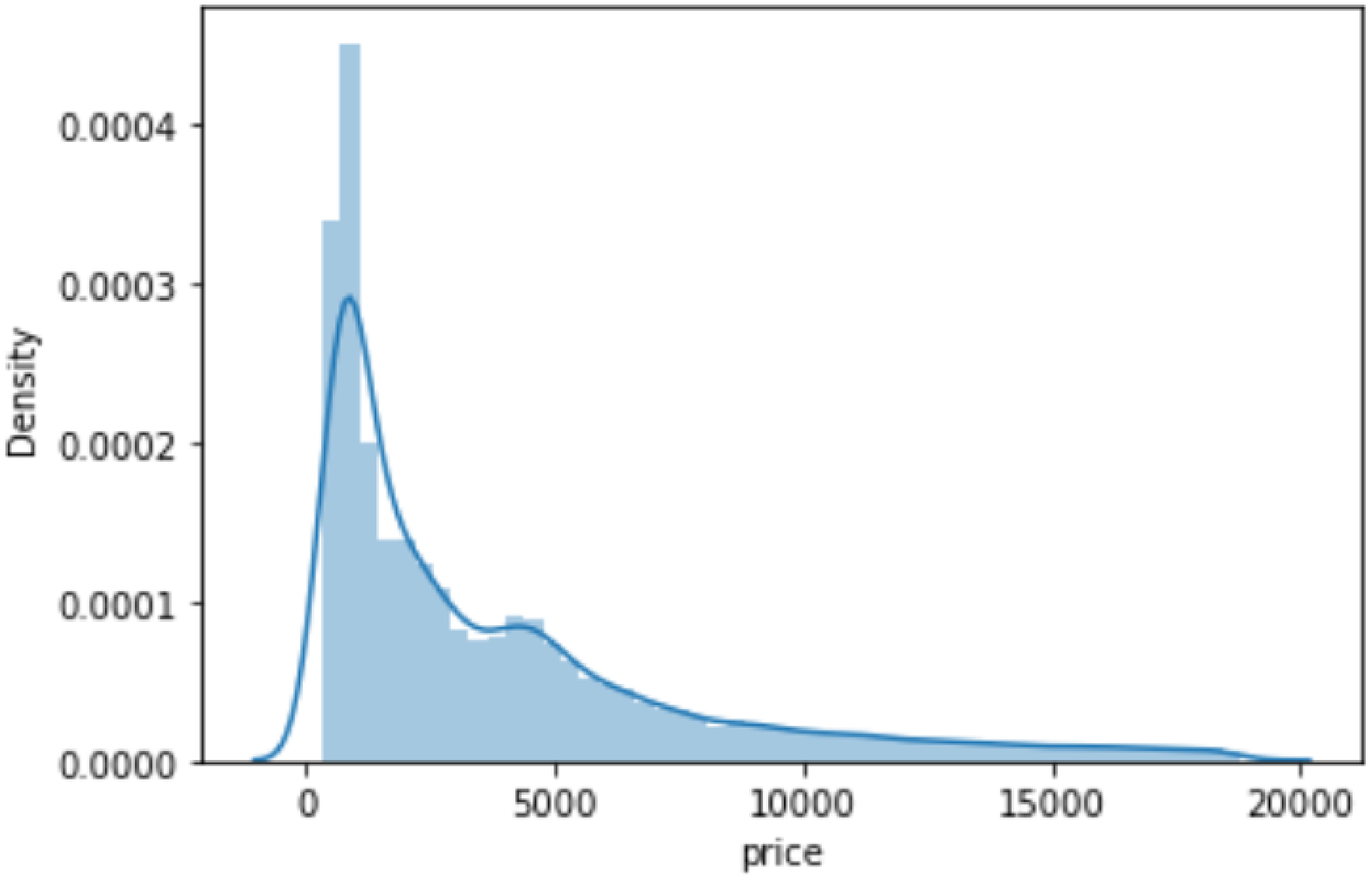
HEATMAP

To shows the relations between the features.
This result shows that Carat has the strong correlation with Price.




Distribution of diamond carat weight
Frequency
Carat weight
0
2500
5000
7500
10000
12500
15000
17500
0
1
2
3
4
5

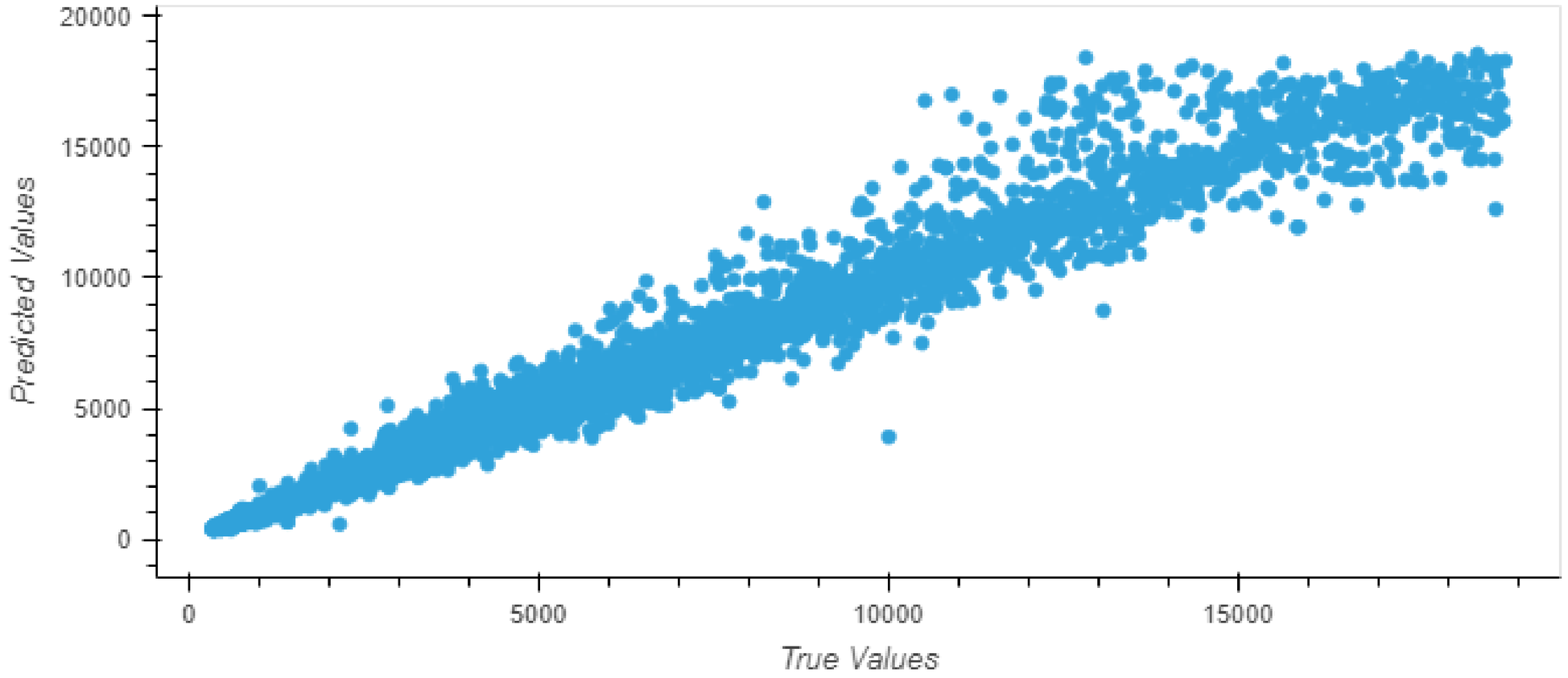

Diamond price distribution
Frequency
Diamond price
0
2500
5000
7500
10000
12500
15000
17500


0.0004
0.0003
0.0002
0.0001
0.0000
Density
0
5000
10000
15000
20000
price

REGRESSION MODELS

- Linear Regression
- Polynomial Regression
- Ridge
- Random Forest

Prediction result



Thank you!

LET US KNOW IF YOU HAVE
QUESTIONS OR CLARIFICATIONS.