King County Housing Data Analysis

INTRODUCTION

- This project focuses on giving information for a potential homeowner looking to purchase a home in King County, Washington.

- The buyer plans to live in the house for three to five years and then sell it for a profit, if possible.

- The buyer also has money set aside for repairs.

BUSINESS PROBLEM

This analysis aims to answer the following questions:

What is the impact of living in a particular section of King County versus other sections.

What is the correlation between a house's square footage of living space and it's selling price?

Where is the housing market trending in King County, and what are the factors influencing it?
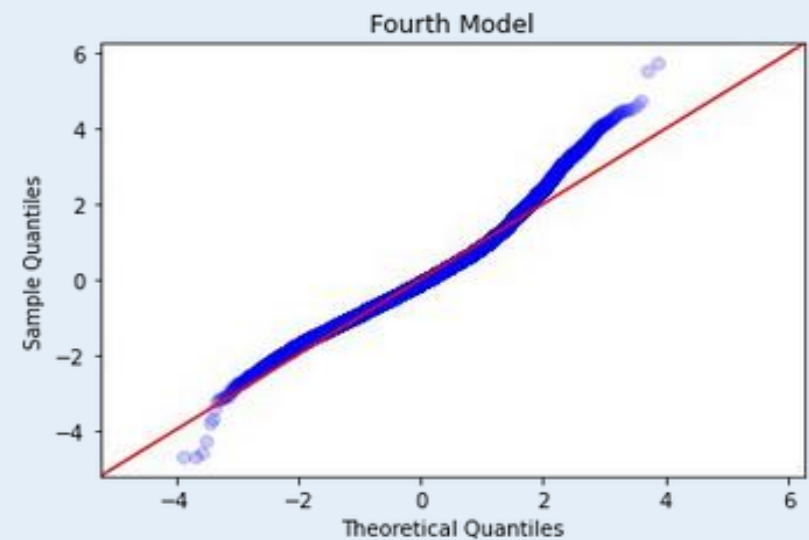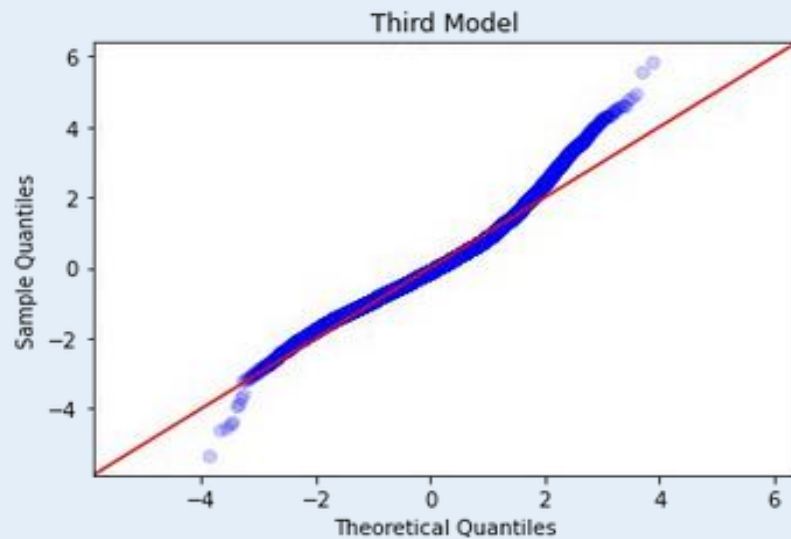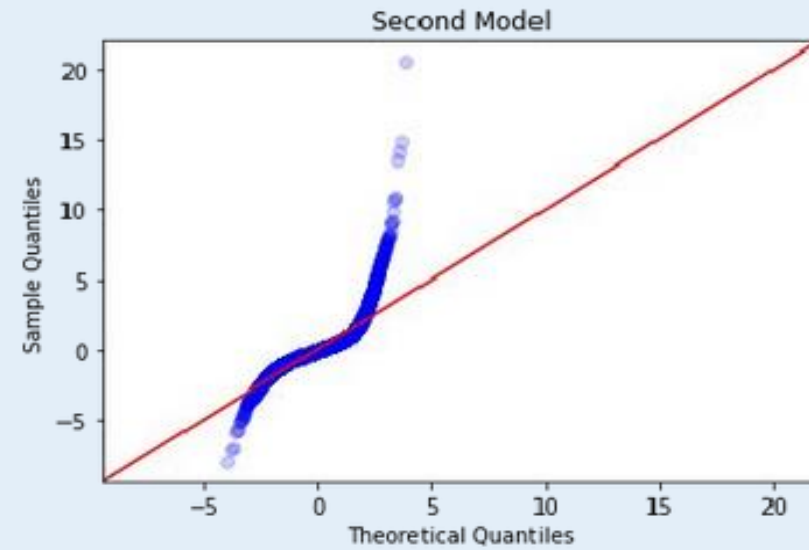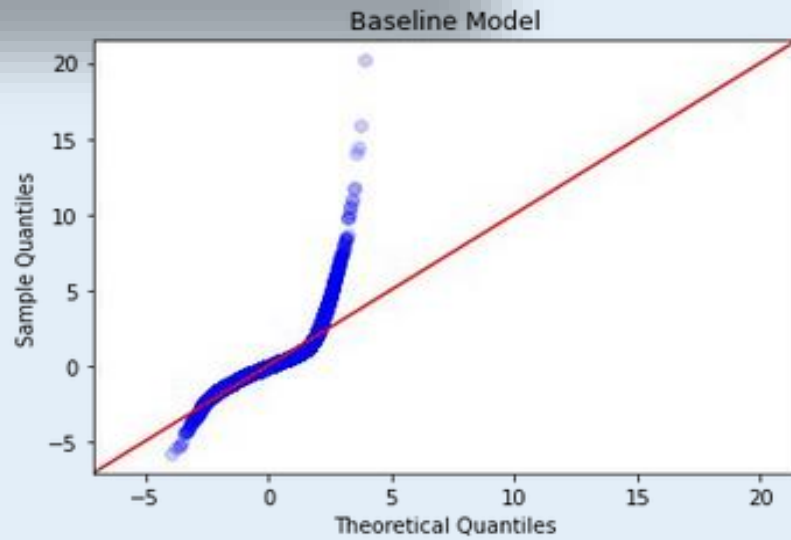
LIBRARY

DATA

- Analysis focuses on the King County Housing dataset provide by Kaggle.com

- Data included 21,597 records of homes sold in 2014 and 2015

- Entries contained information such as selling price, square feet of living space, number of bedrooms, etc.
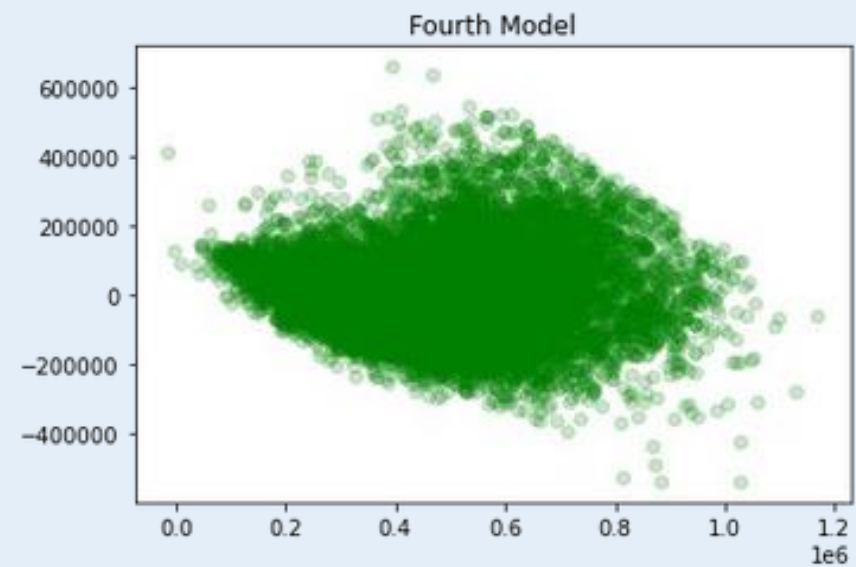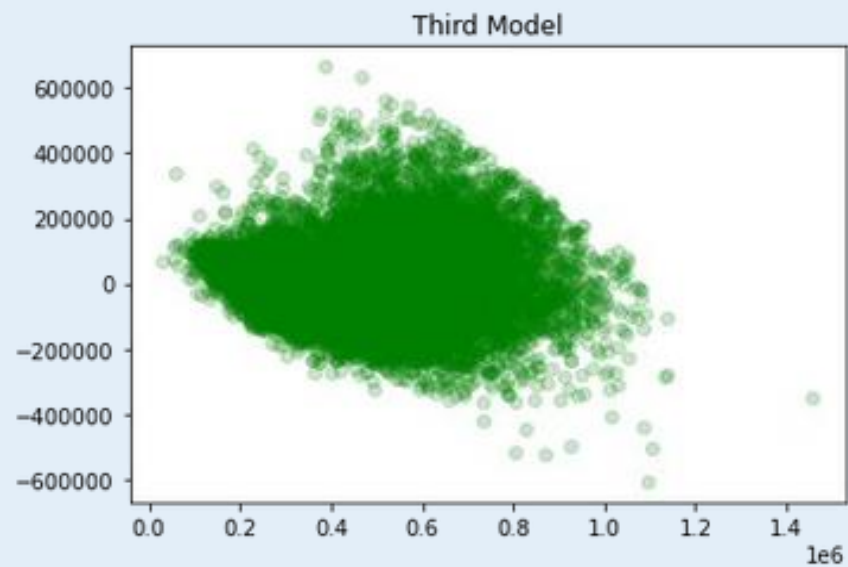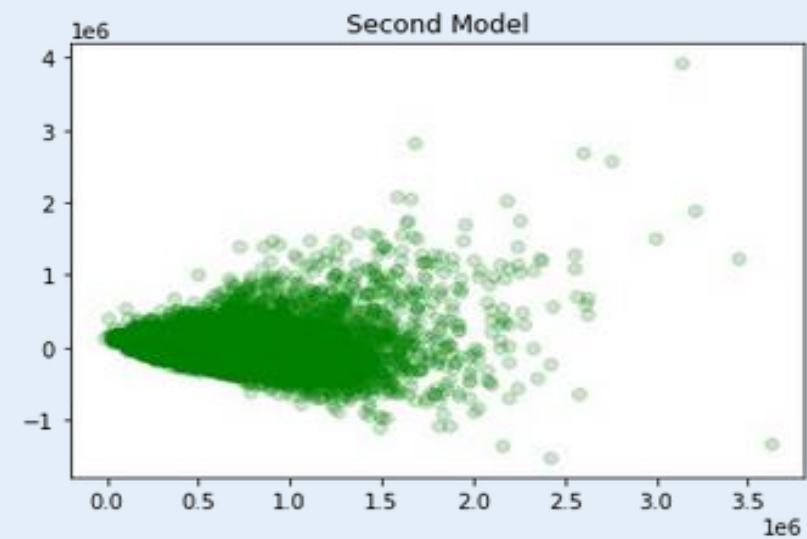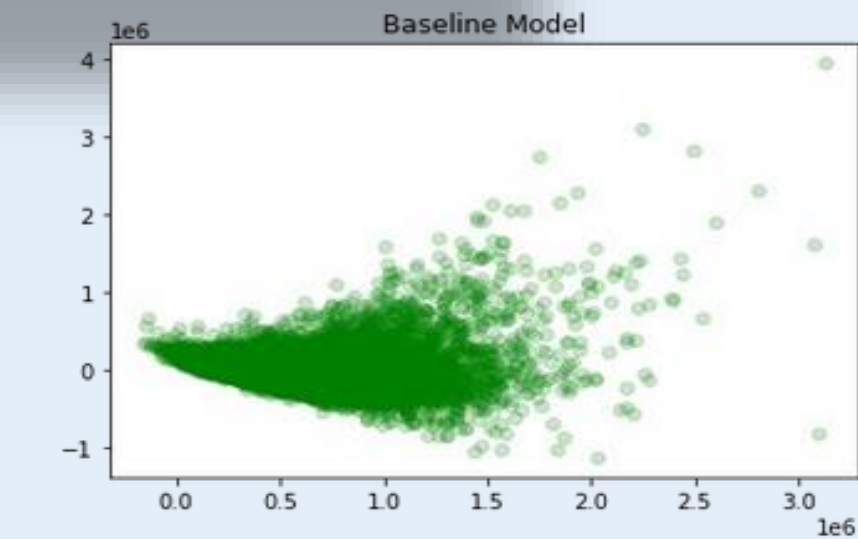
METHODS

1. Preprocessed the dataset by performing data cleaning.
2. Generated dummy variables for all categorical features and removed outliers from continuous variables.
3. Applied log transformations to continuous variables and standardized the scaled data.
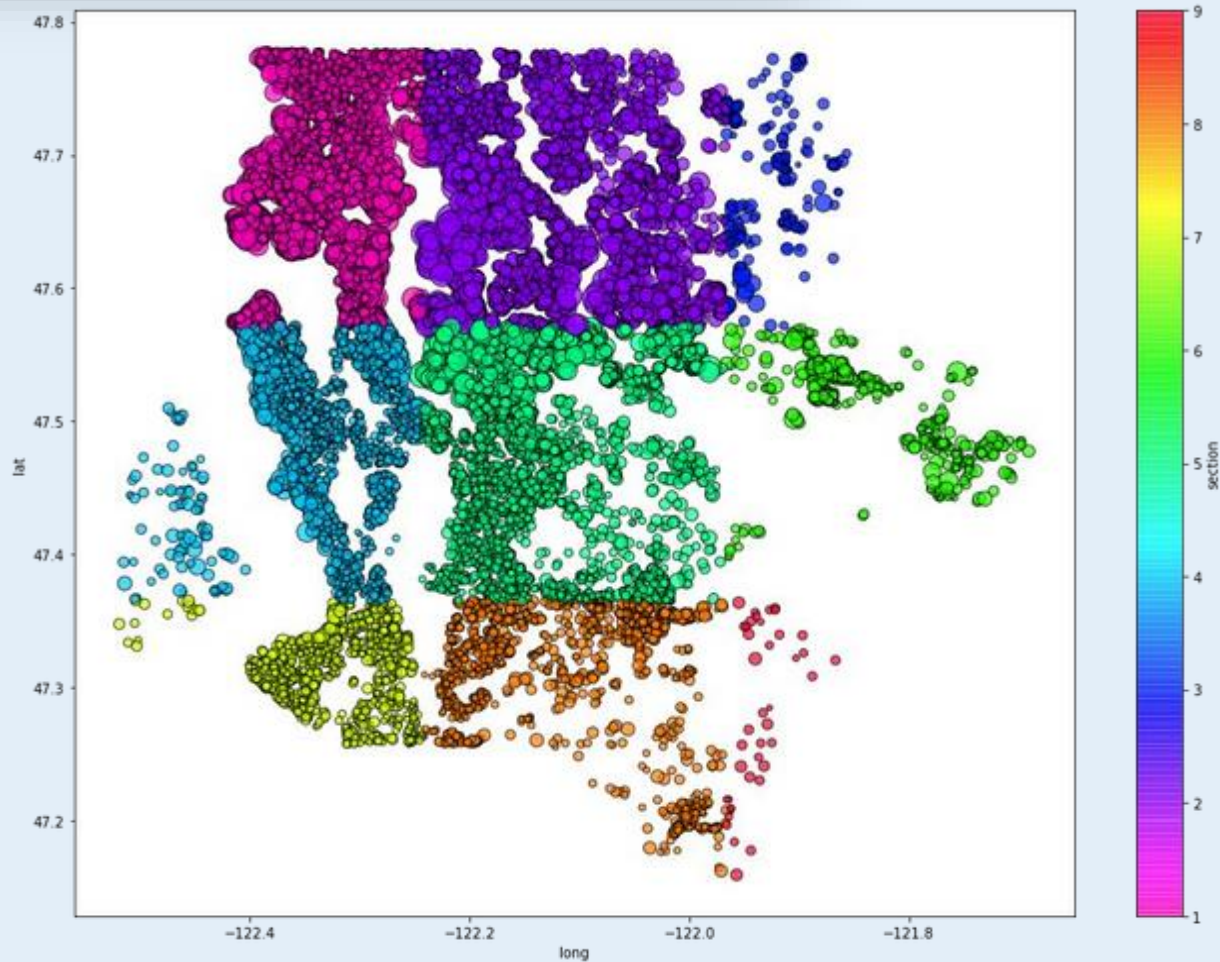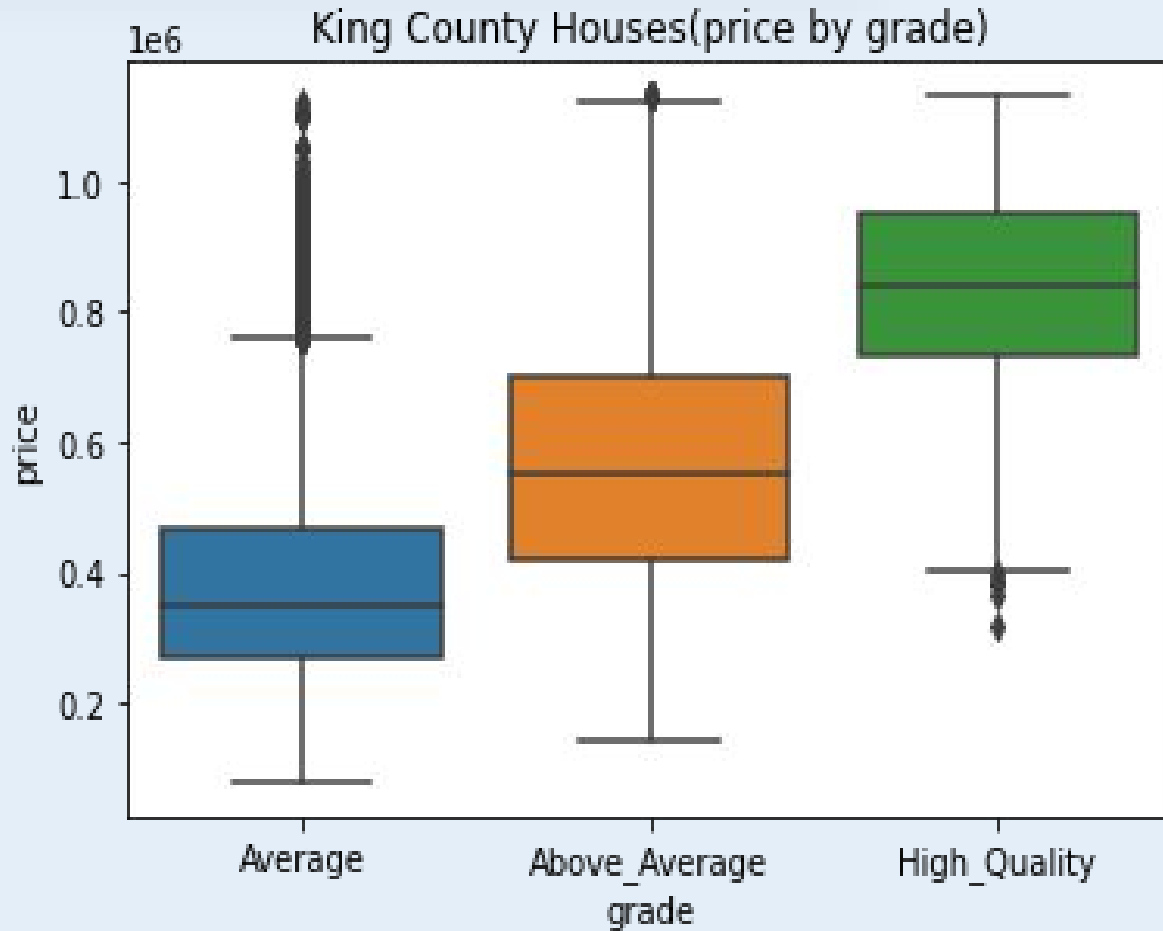
NORMALITY

HOMOSCEDASTICITY

CONCLUSIONS

Model 4 advises purchasing
homes in sections 1(pink)
and 2(purple)
Homes North of 47.57 Lat.
and West of -121.97 Long.

9

CONCLUSIONS

King County Houses(price by grade)

Renovations should be made using highest quality contractors and materials

CONCLUSIONS

	coefficient
sqft_living	676146.942065
Grade_High_Quality	253667.108839
View_4	218207.762842
Intercept	166583.865718
Condition_5	161292.797051
Condition_4	133805.608255
View_3	108943.847766
Condition_3	105616.408877
Grade_Above_Average	96526.407549
View_1	93599.373751

FUTURE ANALYSIS

➢ Integrate additional datasets containing details about schools, services, and related information.

➢ Utilize and implement geospatial libraries for geographical analysis.

Thank you for reading.

Group Members:
1. Rowlandson Kariuki.
2. Martin Kithome.
3. Francis Gatura.
4. Joseph Malombe