King's County Homes Data Analysis For a Real Estate Agency

07 July 2022

Summary

- -The houses with an overall condition of about 3 and 4 seem to have the highest sale price. This is a surprise as you would expect the ones with an overall condition of about 5 to have the highest sale price. The rating index is from (1-5)
- -The number of bathrooms have a linear relationship to the price. The number of bathrooms could therefore contribute to the overall price of the house.
- -Price increases with the number of bedrooms up to around where we have 8 bedrooms. The price also increases from 12 to 33 bedrooms but there is a decrease in the slope meaning the impact of the number of bedrooms to the price decreases as soon as we get to about 8.
- -The most expensive houses have about two floors. One surprising inference is that those with one floor are more expensive as compared to those with three floors.
- -Houses with a view rating higher than two have a positive linear relationship with the price.
- -The King's County Grade and the prices have a positive linear relationship.
- -Most Houses sold in King’s County are averagely priced and only very few are on the high-end.

Outline

- Business Problem
- Data and methods
- Results
- Conclusions

Business Problem

- The real estate agency would like to be able to advise homeowners on how some of their home features are likely to have an impact on the value of their home
- Have a model that could predict house prices

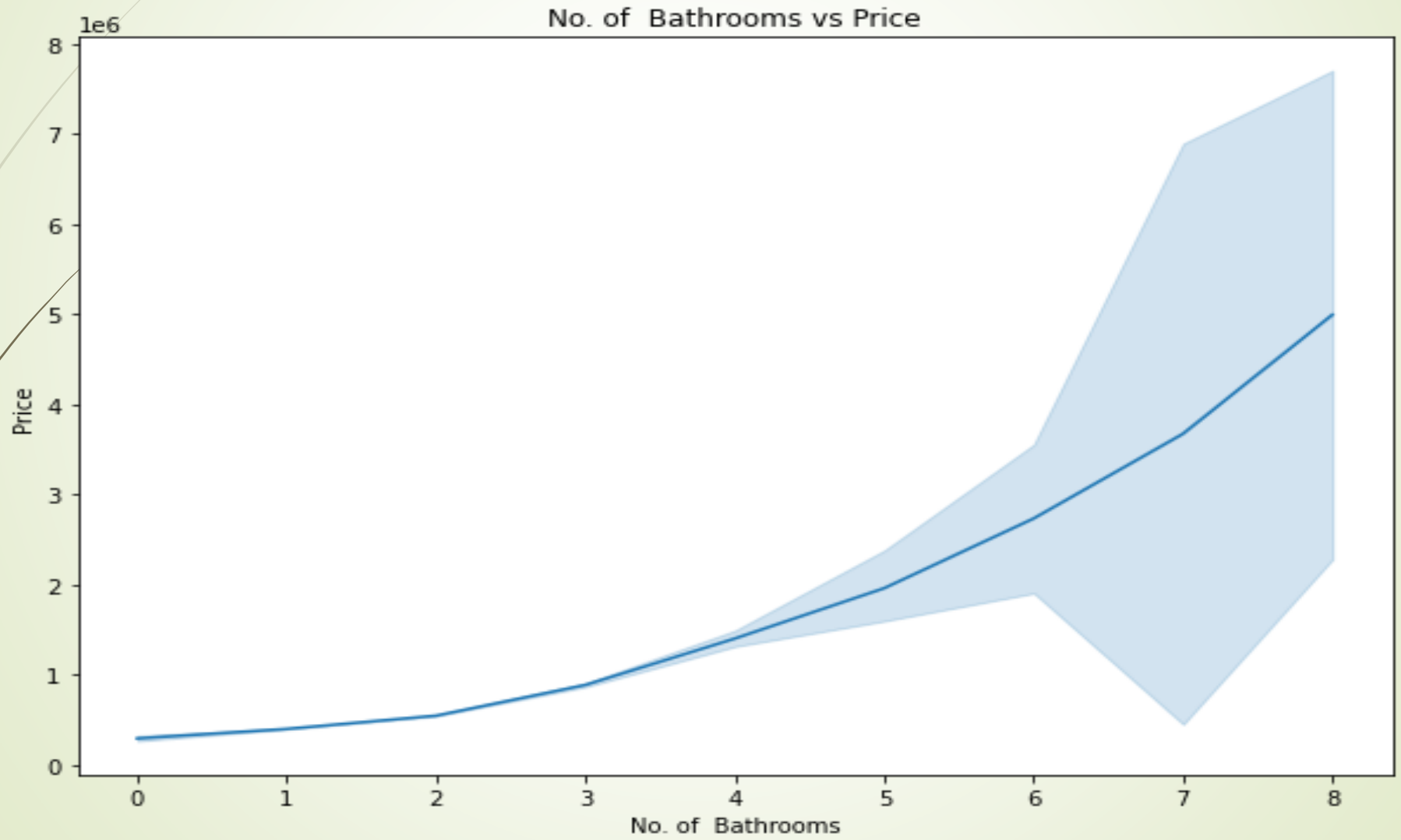
Data and Methods

The data used was obtained from the King's County Home sales data in 2015. Exploratory data analysis and modelling technique were used in its analysis

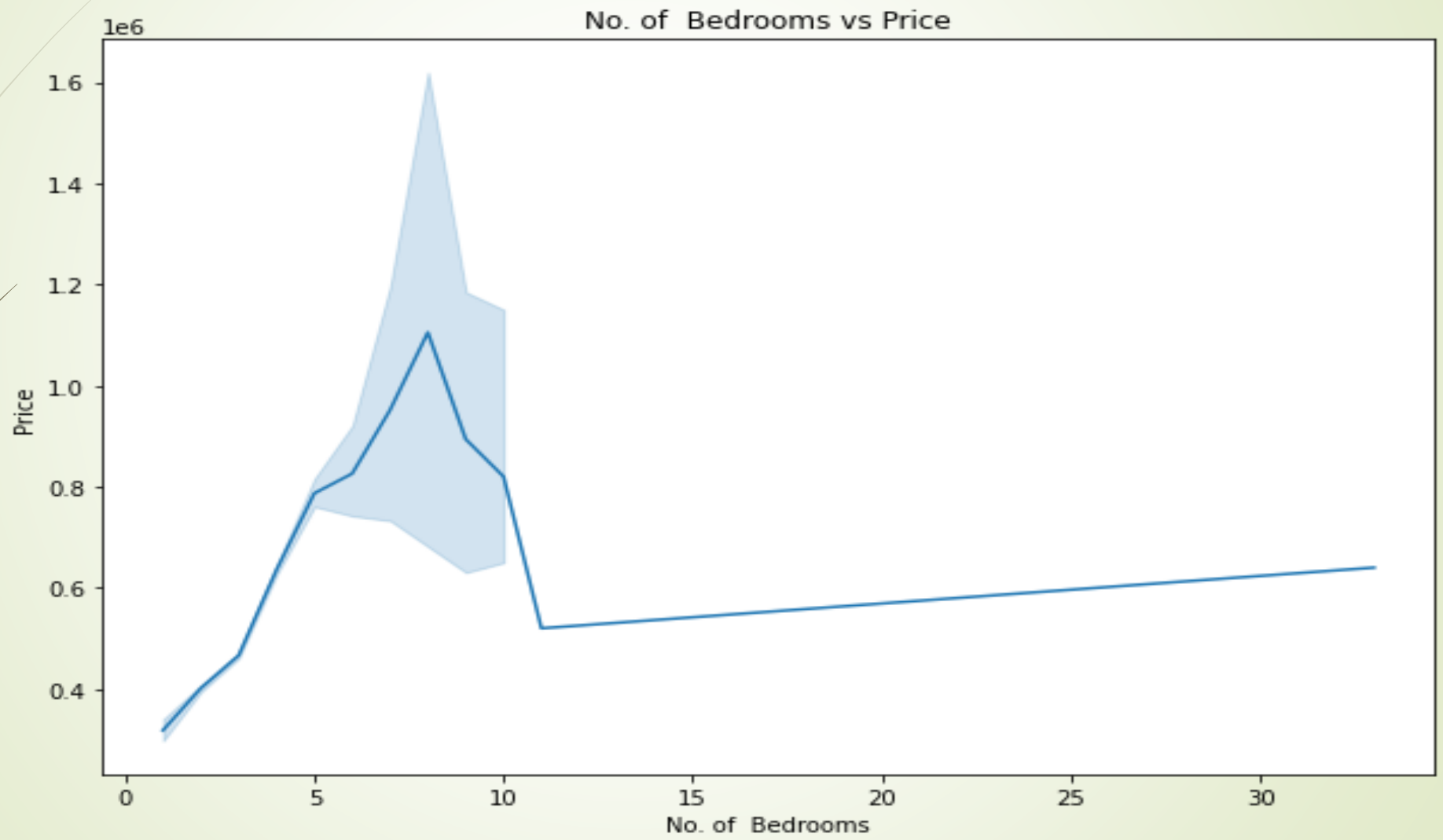
Results

- The houses with an overall condition of about 3 and 4 seem to have the highest sale price. This is a surprise as you would expect the ones with an overall condition of about 5 to have the highest sale price. The rating index is from (1-5)
- The number of bathrooms have a linear relationship to the price. The number of bathrooms could therefore contribute to the overall price of the house.
- Price increases with the number of bedrooms up to around where we have 8 bedrooms. The price also increases from 12 to 33 bedrooms but there is a decrease in the slope meaning the impact of the number of bedrooms to the price decreases as soon as we get to about 8.
- The most expensive houses have about two floors. One surprising inference is that those with one floor are more expensive as compared to those with three floors.
- Houses with a view rating higher than two have a positive linear relationship with the price.
- The King's County Grade and the prices have a positive linear relationship.
- Most Houses sold in King’s County are averagely priced and only very few are on the high-end.

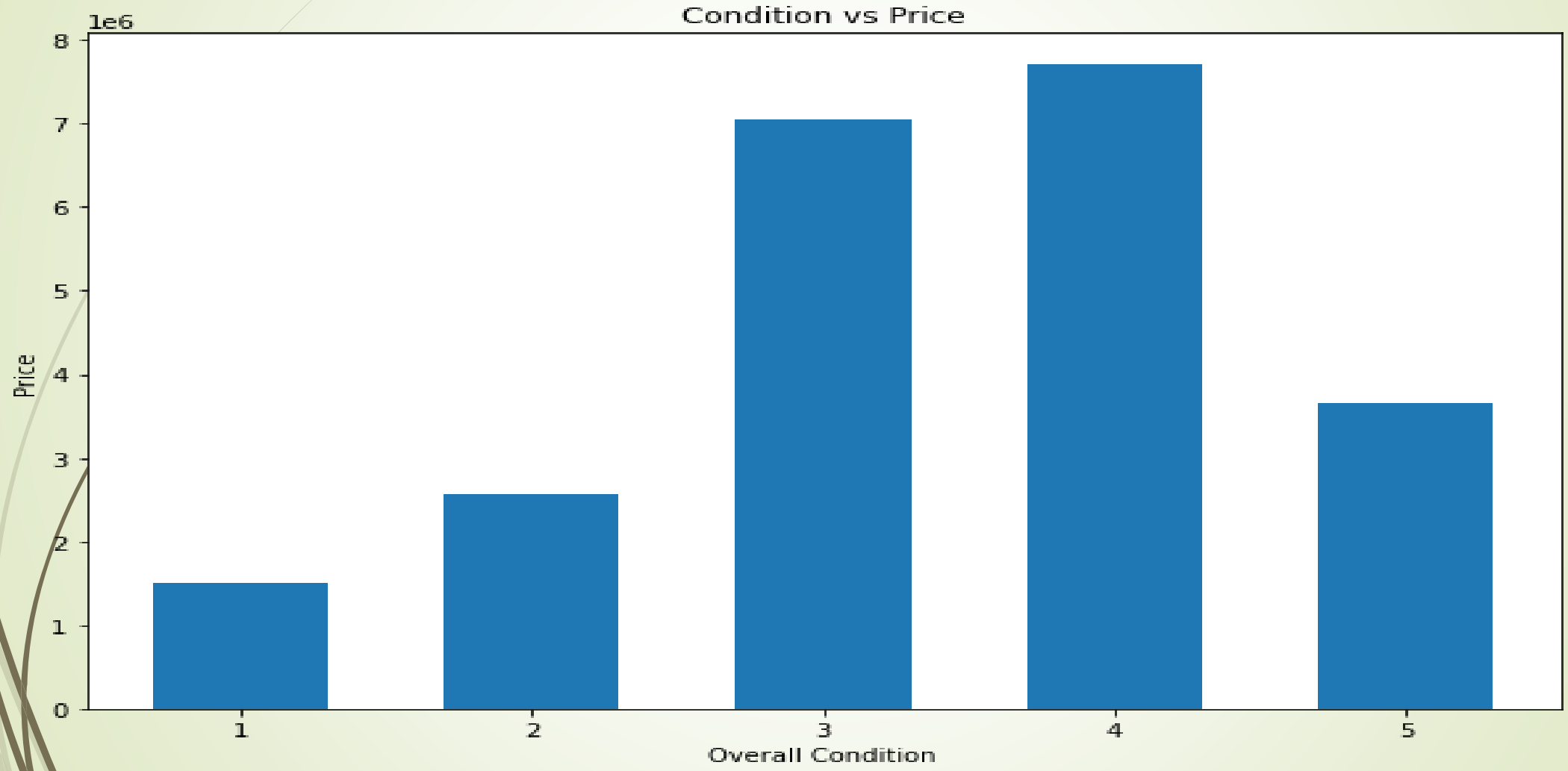
Results


No. of Bathrooms vs Price
1e6
8
7
6
5
4
3
2
1
0
Price
0
1
2
3
4
5
6
7
8
No. of Bathrooms

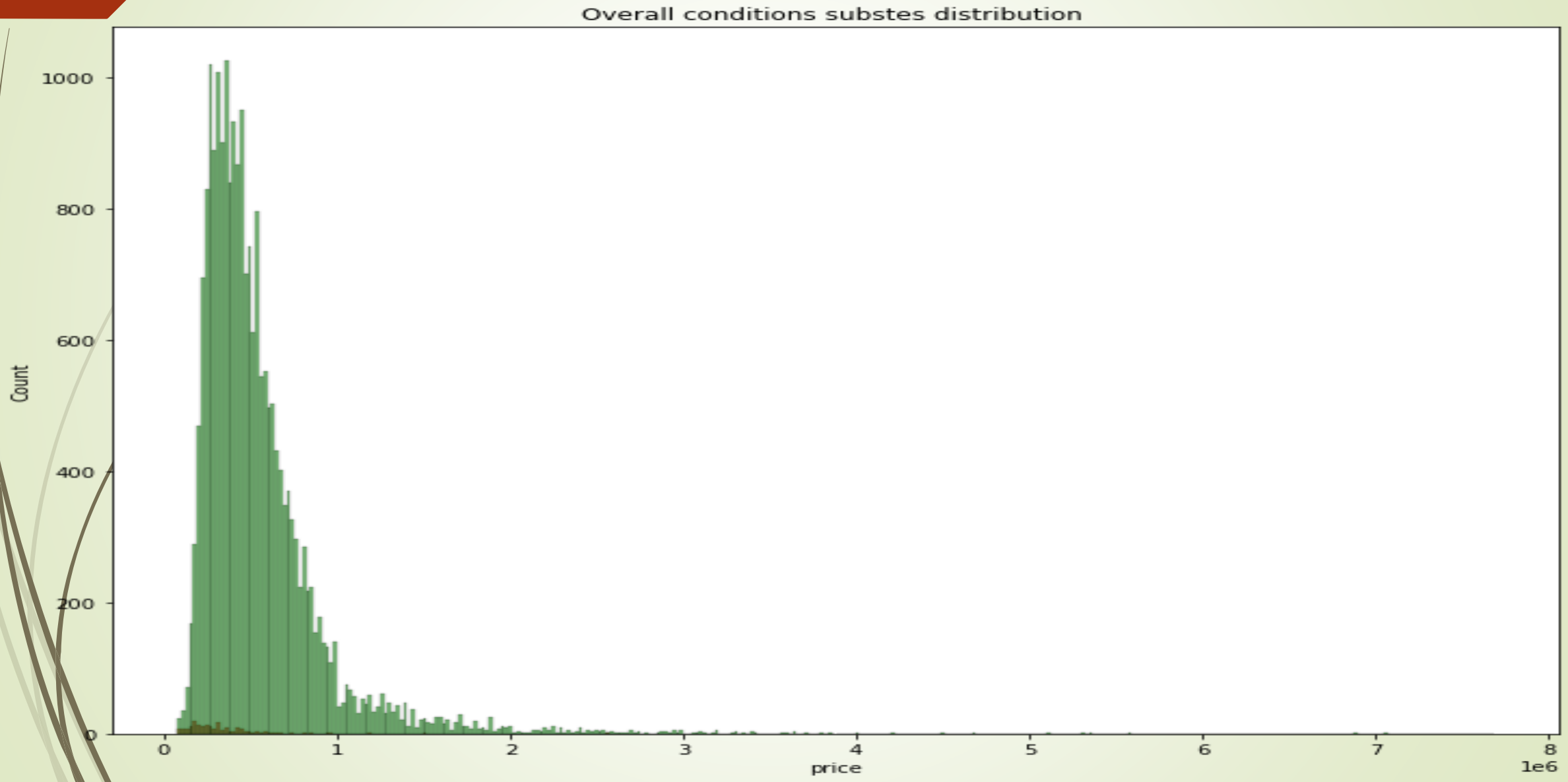
Results


No. of Bedrooms vs Price
1e6
1.6
1.4
1.2
1.0
0.8
0.6
0.4
Price
0
5
10
15
20
25
30
No. of Bedrooms

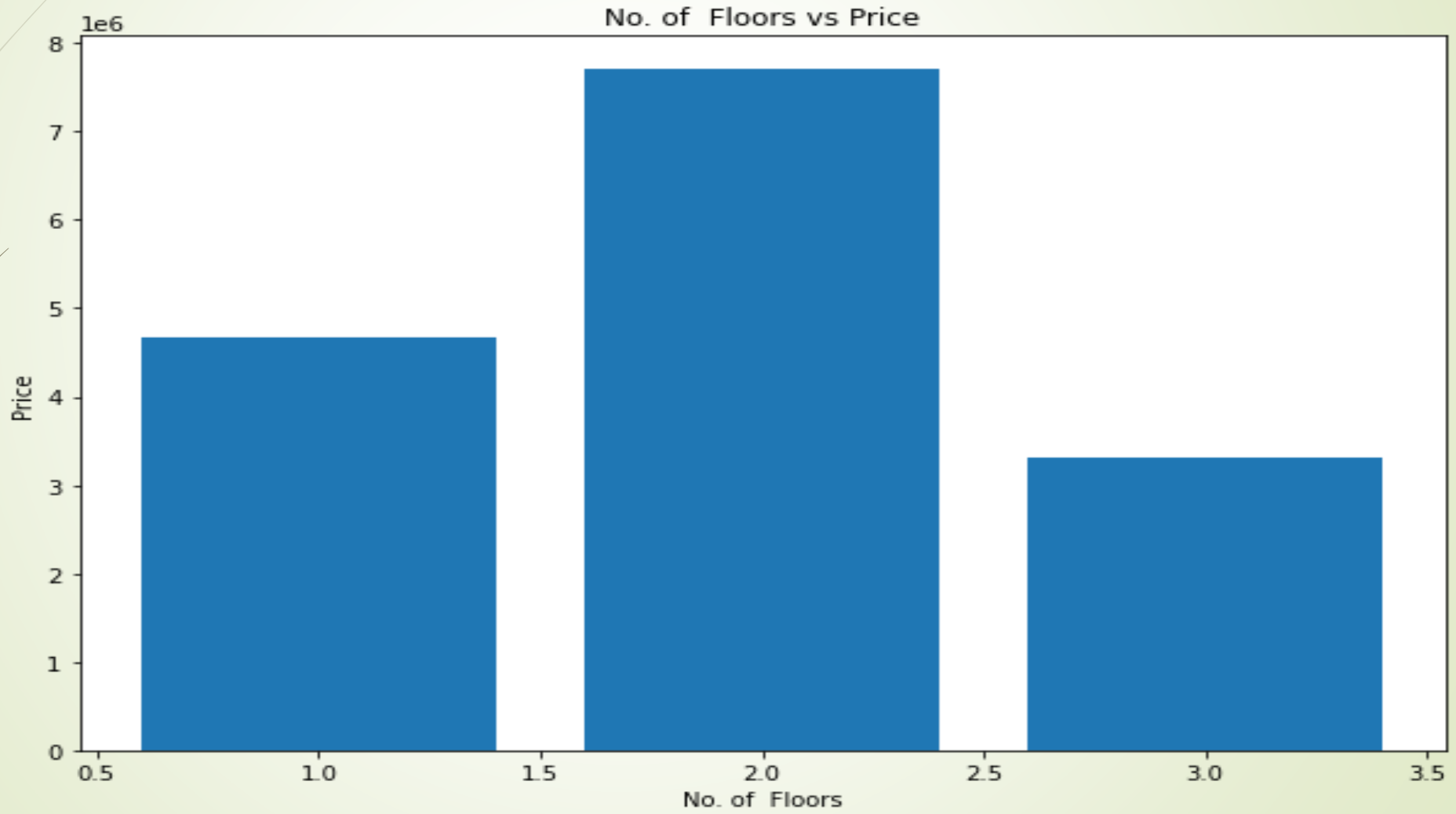
Results


Condition vs Price
1e6
8
7
6
5
4
3
2
1
0
Price
1
2
3
4
5
Overall Condition

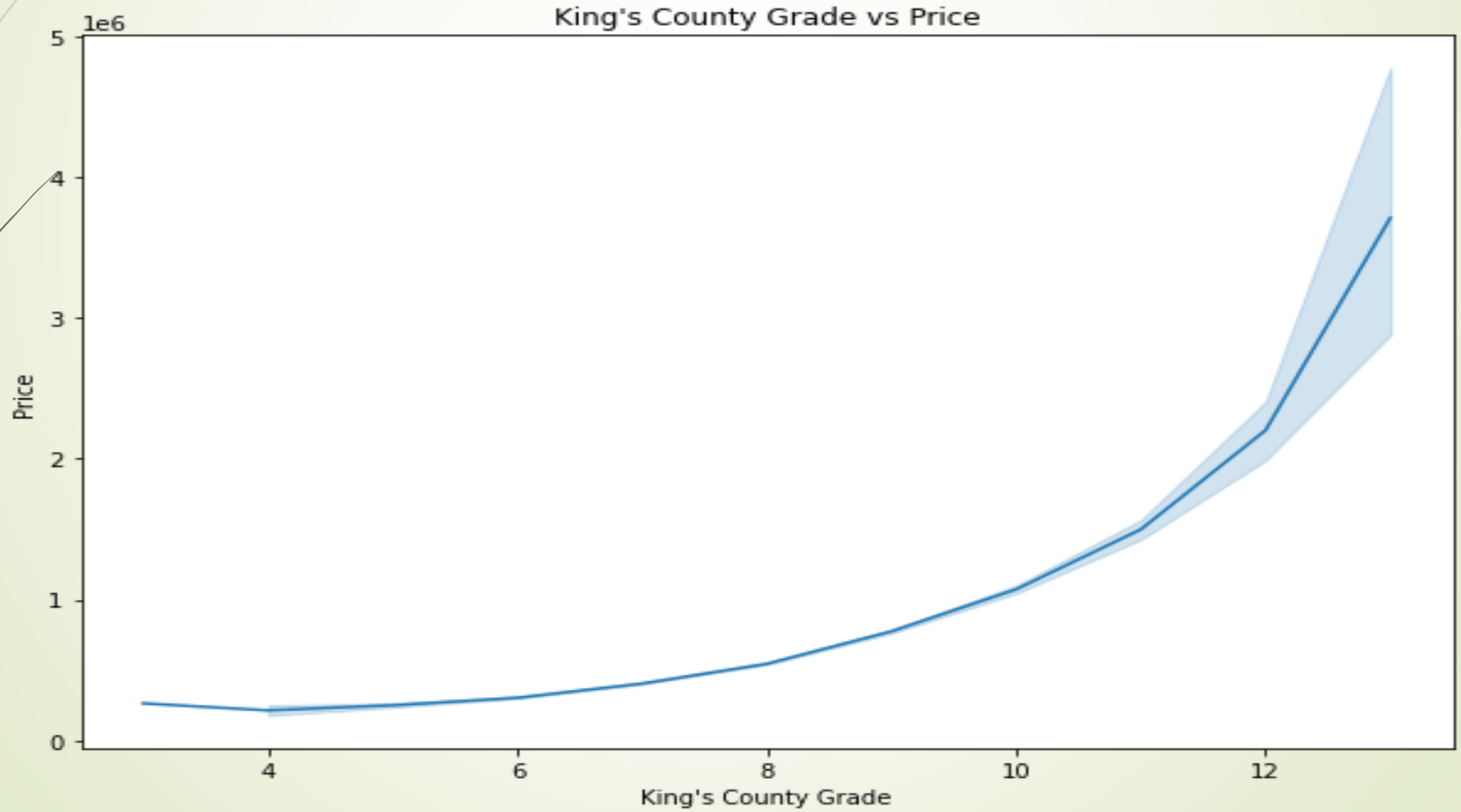
Results


Overall conditions substes distribution
Count
1000
800
600
400
200
0
0
1
2
3
4
5
6
7
8
price
1e6

Results


No. of Floors vs Price
1e6
8
7
6
5
4
3
2
1
0
Price
0.5
1.0
1.5
2.0
2.5
3.0
3.5
No. of Floors

Results


King's County Grade vs Price
1e6
5
4
3
2
1
0
Price
4
6
8
10
12
King's County Grade

Recommendations

This analysis leads to the following recommendations for the real estate agency:

- The real estate agency should advise homeowners in the King's County area looking to sell houses to ensure that the house can achieve a high grade as houses with a good grade sell for more.
- The real estate agency should advise home owners looking to sell to strive to achieve for an overall condition of about 3 or 4. This is as most houses sold have an overall condition of about 3 and 4 and they tend to be higher priced.
- The real estate agency should advise those looking to sell their homes to achieve a view rating higher than two. Most houses sold have a view rating higher than two and they tend to go for higher prices.
- Most houses sold in the King's County area are averagely priced and the real estate agency should advise people looking to sell to have averagely priced homes.

Thank You!!

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