

# PREDICTING HOUSE PRICES USING KING COUNTY HOUSE SALES DATA.

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A stylized illustration of a house with a black roof, white walls, and blue outlines. The house has a central window and a smaller window above it. The background is a light blue sky with white clouds and a light blue ground. A black signpost is visible on the left side of the image.

# BUSINESS PROBLEM

- To find out factors influencing house prices in order to give advisory services to home sellers and home buyers.

A stylized illustration of a house with a black roof, white walls, and blue windows. The house is set against a light blue background with white wavy lines representing grass or clouds. A black rectangular box is positioned in the lower-left foreground, and a teal rectangular box is positioned in the lower-right foreground.


## DATA UNDERSTANDING

- The data used is from house sales in King County. It includes house prices, number of bedroom, bathrooms and floors, condition and grade of the houses, the footage of the houses among others.

A stylized illustration of a house with a black roof, white walls, and a blue chimney. The house is set against a light blue background with white wavy lines representing clouds or grass. A black rectangular box is positioned in the foreground, partially obscuring the house. The word 'PROCESS' is written in white capital letters on the black box. To the right of the black box, a teal rectangular box contains a numbered list of six steps.

# PROCESS

1. Data Cleaning and Scrubbing.
2. Exploratory Data Analysis.
3. Creating Linear Models.
4. Model Validation.
5. Interpretation of final model.
6. Recommendations and Conclusion.



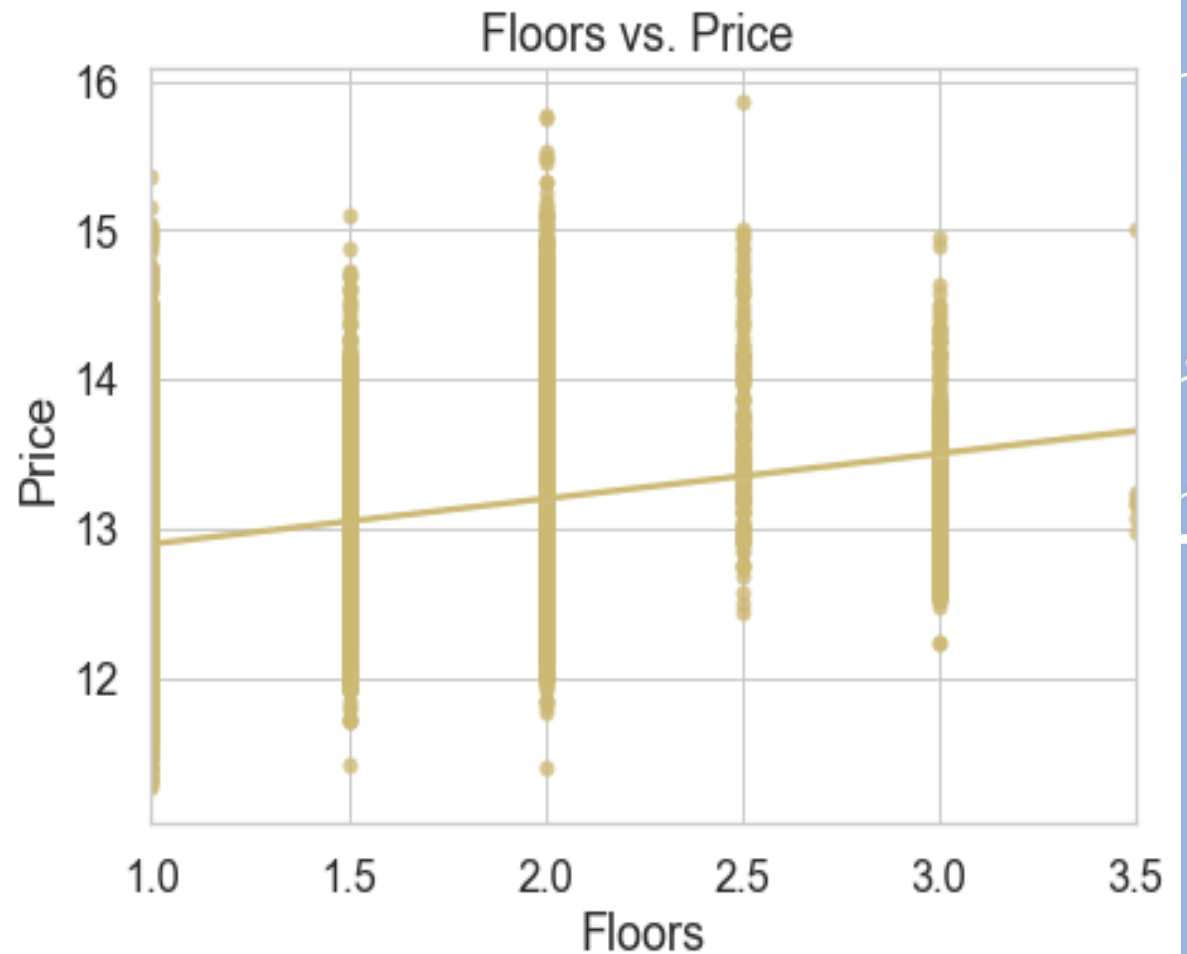
# FINAL MODEL.

- `price ~ sqft_living + bedrooms + floors + cond_5 + cond_2 + cond_1`

R Squared	48.2%
P- value	0.00

# FLOORS VS PRICE.

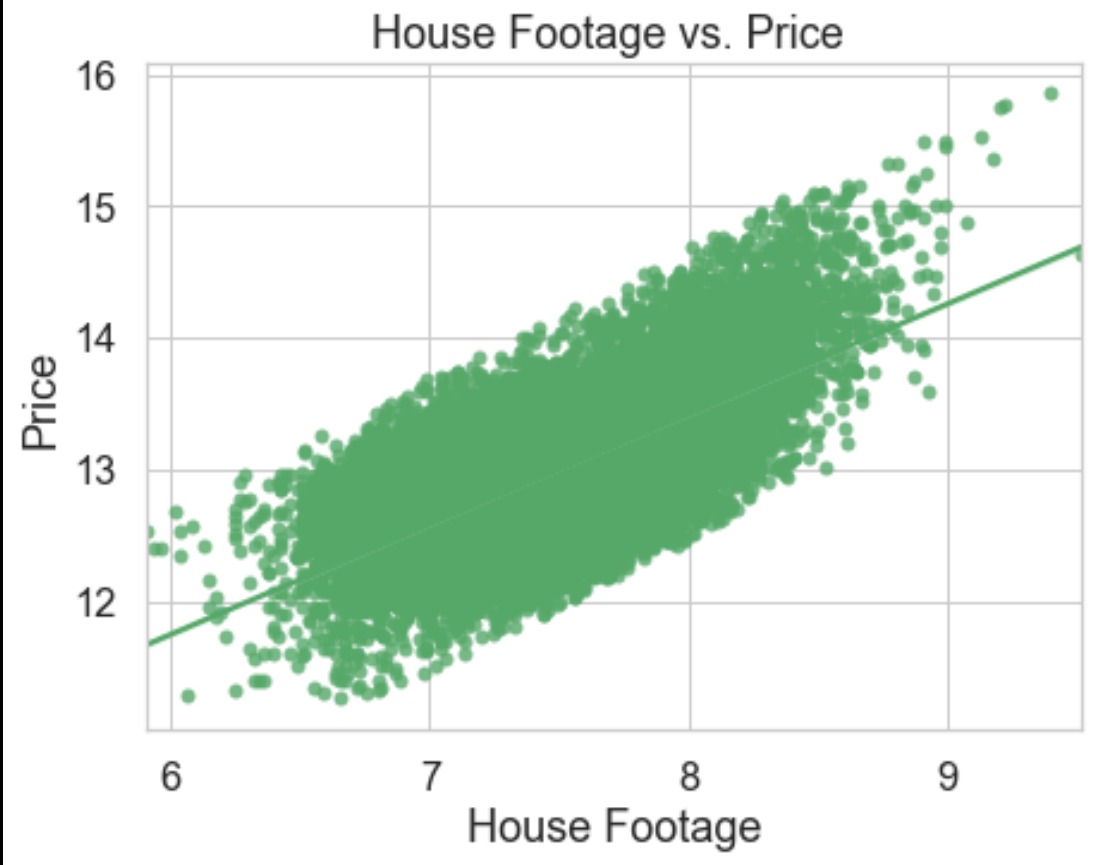
Increase by 1 floor = increase in price by 7%





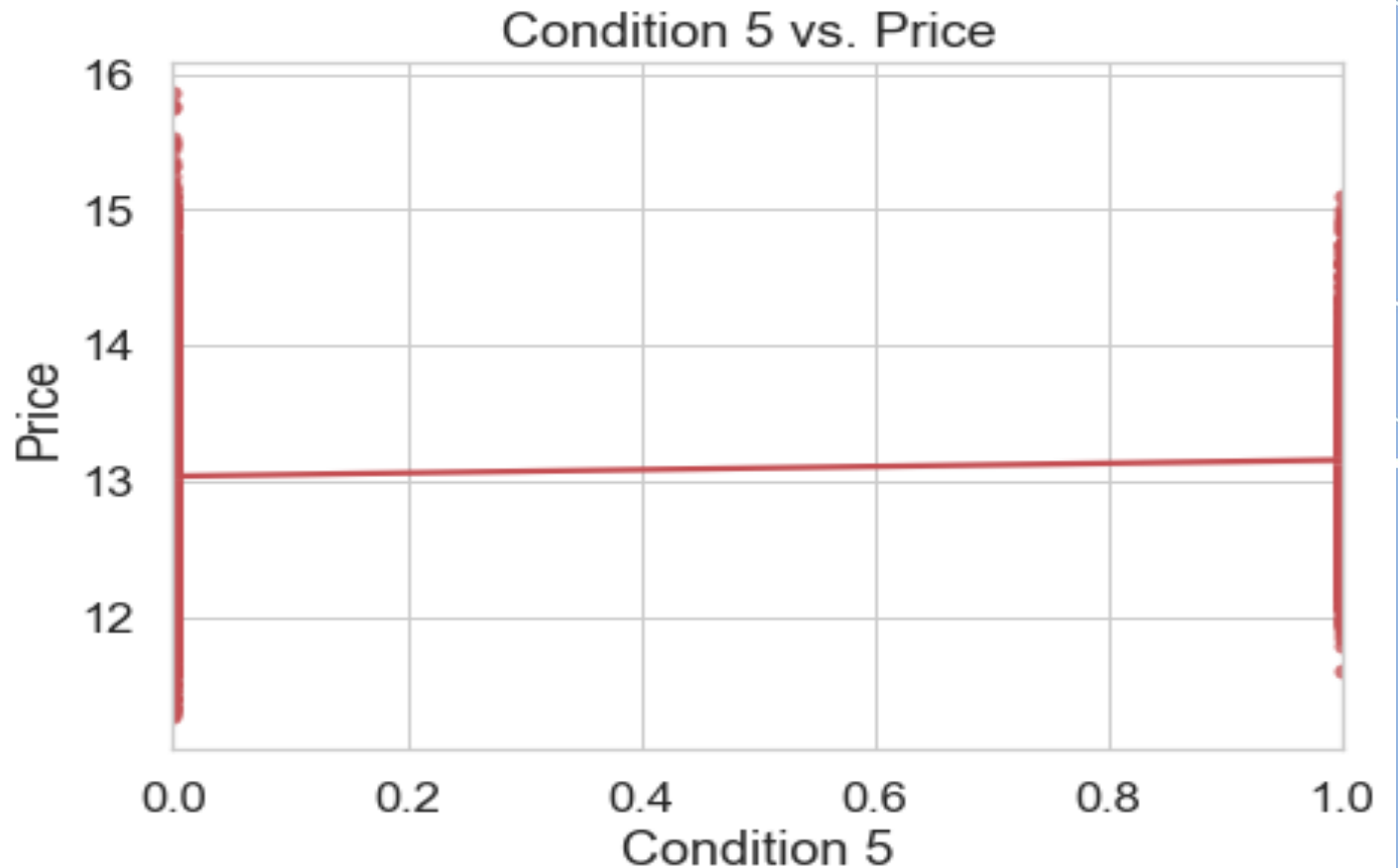
# HOUSE FOOTAGE VS PRICE

Increase in footage = increase  
in price by 0.93



# CONDITION 5 VS PRICE

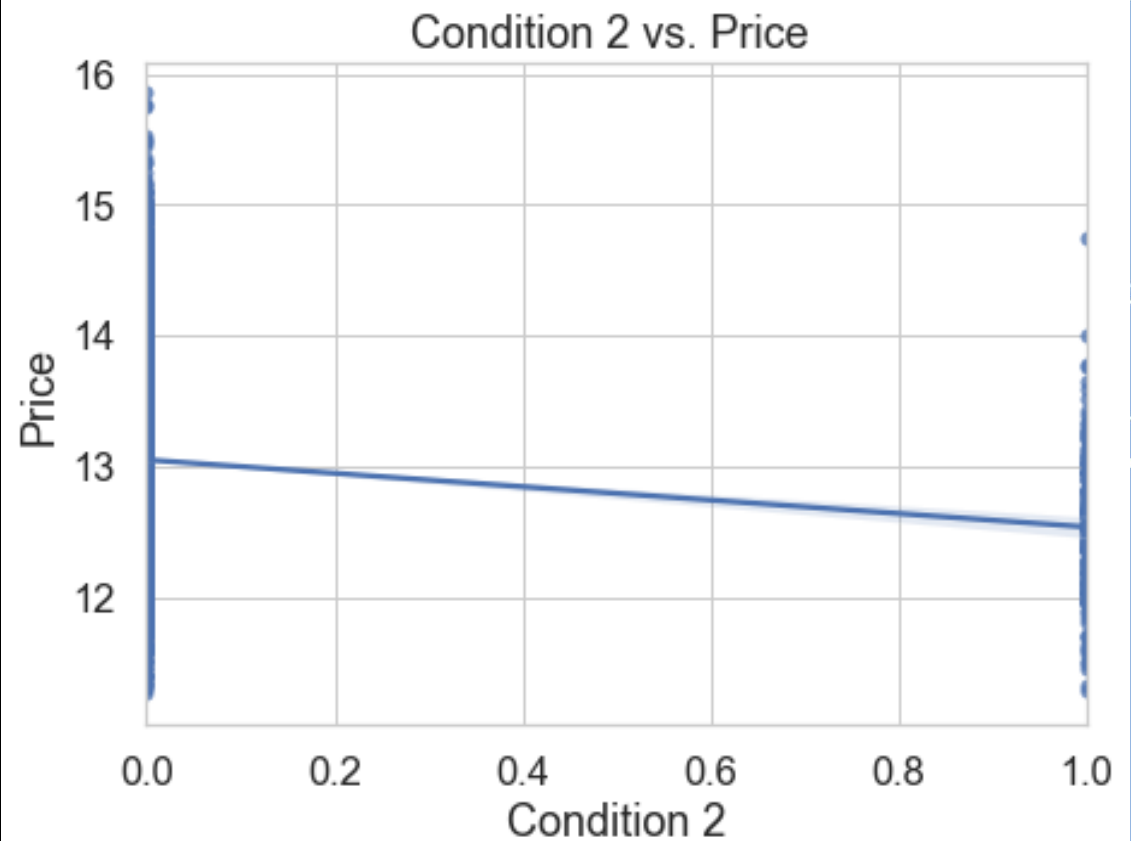
House being in best condition increases price by 16.6%





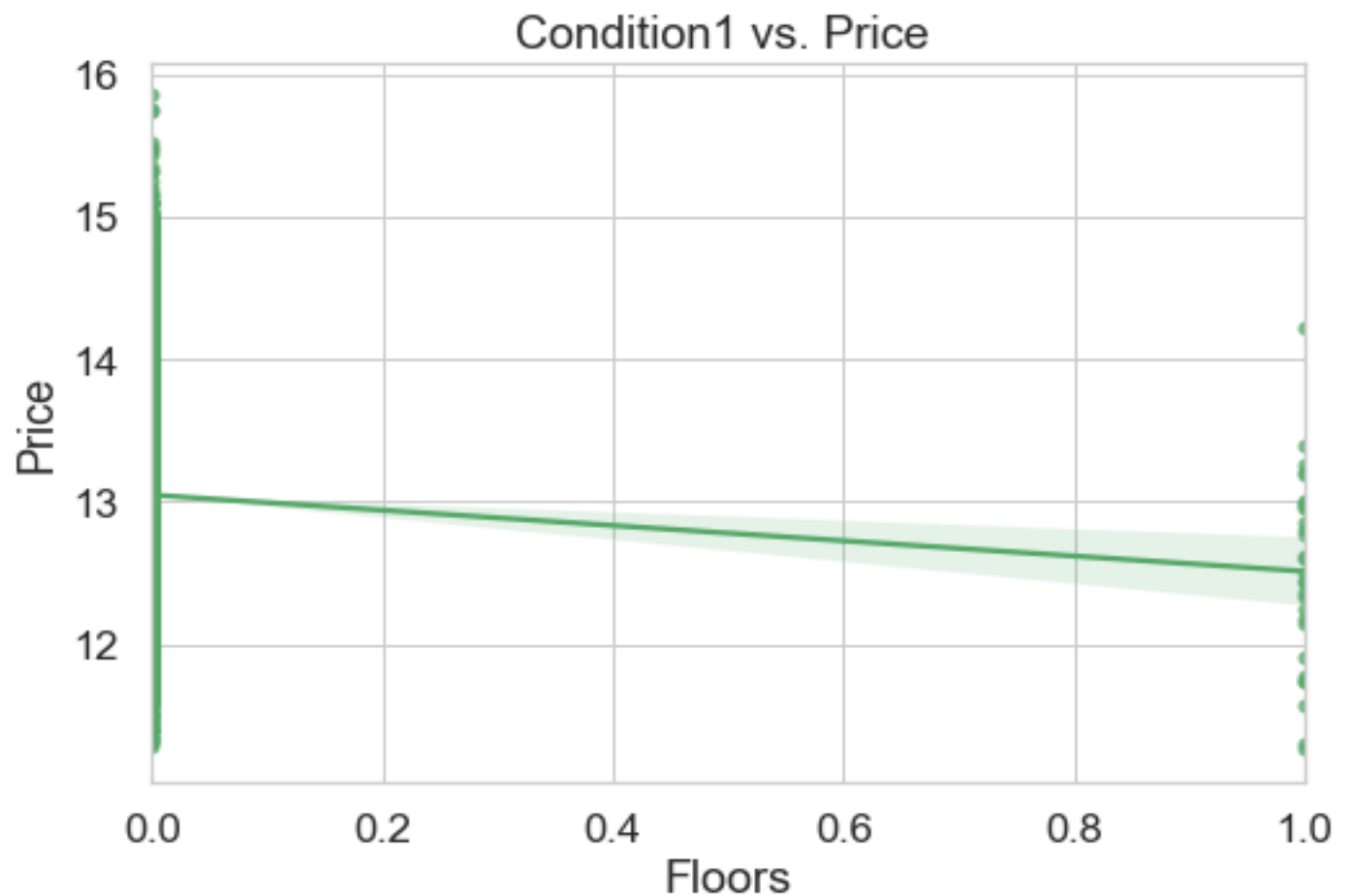
# CONDITION 2 VS PRICE

House being in the condition 2 decreases price by 17%



# CONDITION<sub>1</sub> VS PRICES

House being in the worst  
condition, decreases  
price by 12 %





## RECOMMENDATIONS

- House sellers to increase the number of floors and the footage of the houses.
- House buyers to properly plan financially in order to get the houses with the best features.