Investing in Real Estate in Seattle

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2014 - 2015 Housing Data

- 21xxx properties sold
- Includes information on:
    - Size
    - No. of bedrooms and T&B
    - Neighbourhood
    - Condition and age
- Goal:
    - Find the best predictor of property prices
    - Uncover factors that agents don't consider in pricing properties
    - Bypass the biases agents might have

Data Cleaning Process

- Plotted each predictor then checked for outliers
    - We to see the spread of data was as expected (normally distributed), and spotted exceptional houses that might make our general model harder to fit
- Looked at the ranges and checked for typo errors and invalid values
    - Real estate agents won't type everything correctly - we thoroughly scrubbed the data to check for typos
- Checked whether the related predictors were matching/had been correctly entered
    - If the square foot of the basement + square foot of the upper house = total square foot
    - If the year houses were built were before they were sold (within reason)

- By looking at the raw data impartially, we can see past what we *assume* to be important in pricing a house, and find out what is *actually* important in buying a house

- Once the data was clean and in the format that was suitable for our process, we could begin!

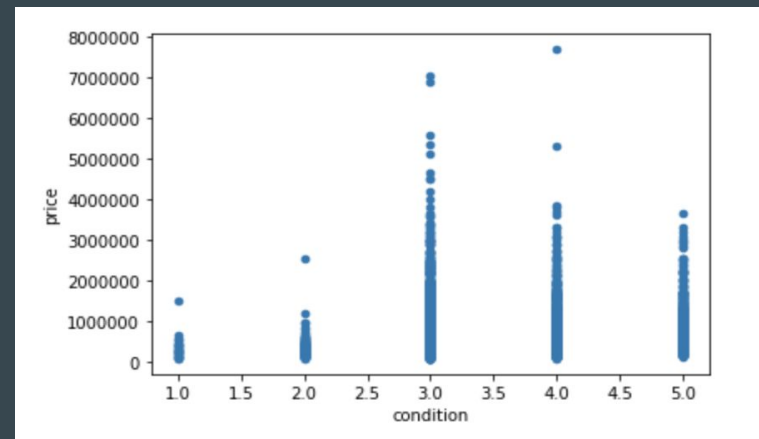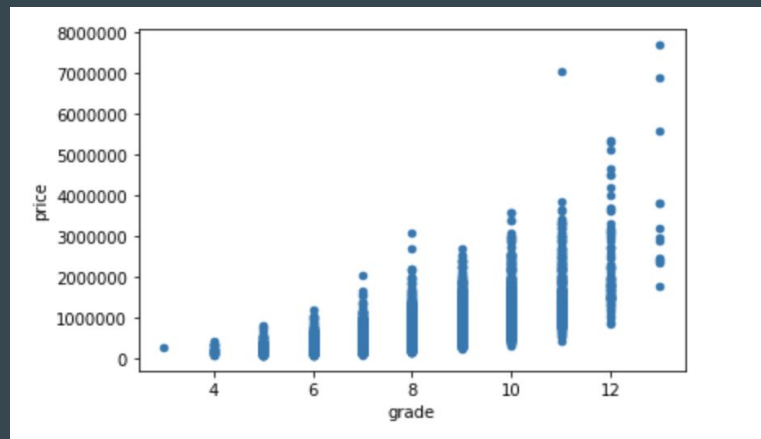# Two Main Price Predictors: Grade & Condition

Grade

King County grading system: 1-3 falls short of building construction and design, 7 has an average level of construction and design, and 11-13 have a high quality level of construction and design

Condition

An index from 1 to 5 on the overall condition of the property

Two Main Price Predictors: Grade & Condition

Better condition and better grade obviously infer a more expensive house, as we can see some correlation upwards clearly - but our model allowed us to see further than this - these two predictors punch above their weight in our model!

Conclusion

Housing Data: We found that 60% of variation in price was explained by grade and condition.

Grade and Condition

While condition can be improved, when choosing between 2 properties at the same price level it is worth looking at the official grade. Presented with two houses of similar price and that you like equally, consider that one house might be hiding a poorer Condition rating, and therefore it might be comparatively overpriced.

The condition of a house impacts the price greatly, so we would encourage people who think they can find a way to cheaply improve the condition of the property to do so, as in this market that represents a good increase in value.