# House Sales in King County, USA

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# **Project Description**

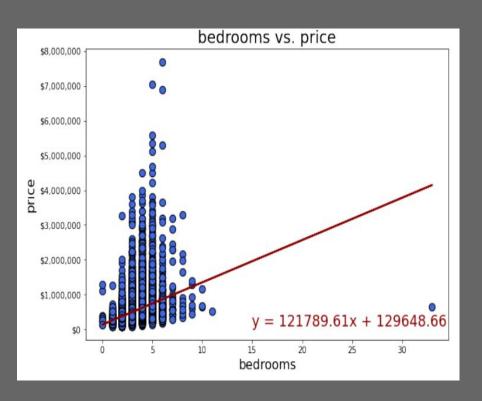
The House Sales in King County, USA dataset contains house sale prices for King County, which includes Seattle from May 2014 to May 2015.

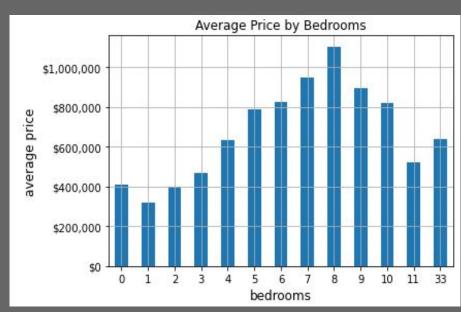
Research Question: Do house features have an effect on the price of house sales?

<u>Hypothesis</u>: House features do have an effect on the price of house sales.



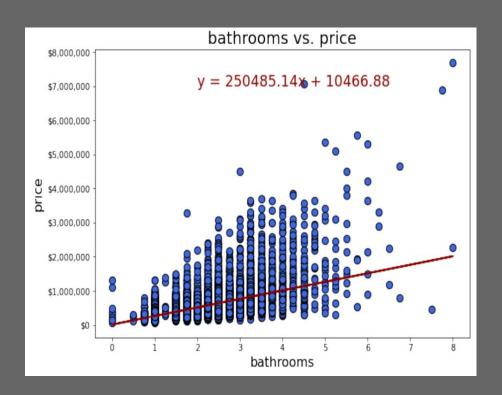
## Is the price higher when there are more bedrooms?

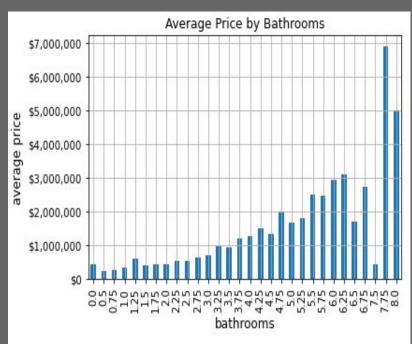




The r-squared is: 0.3083383686880964

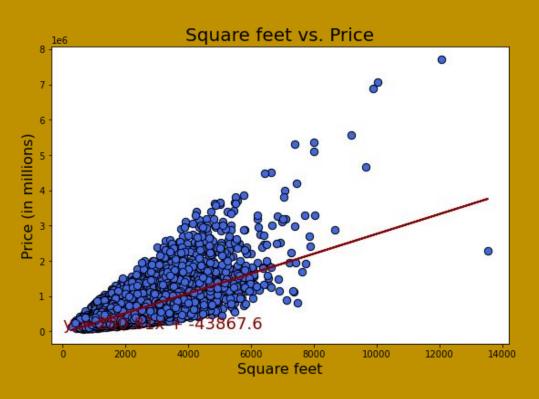
# Is the price higher when there are more bathrooms?



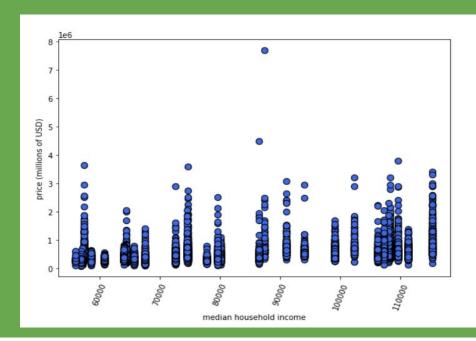


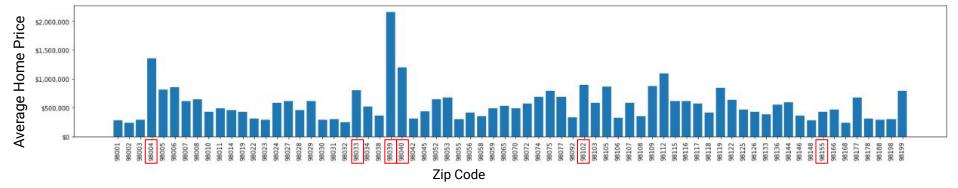
The r-squared is: 0.5251340727456009

## What's the correlation between square feet and pricing?

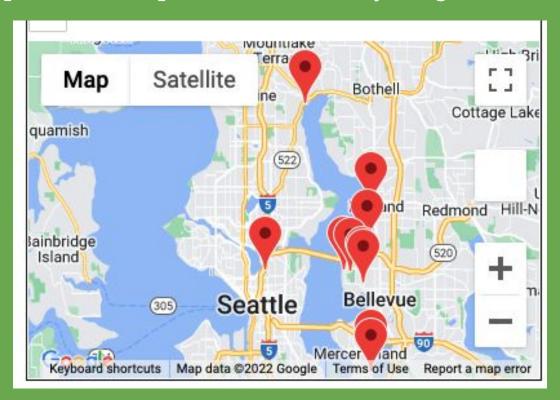


Are house sale prices higher in higher income neighborhoods?





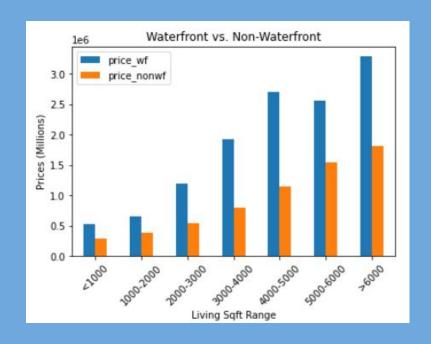
#### Map of top 10 most expensive houses by neighborhood zipcode

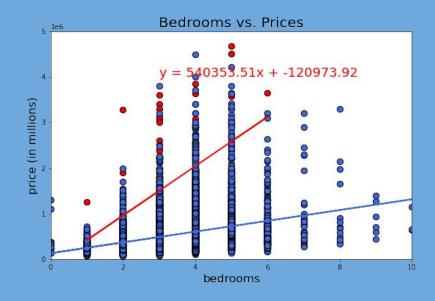


## Waterfront View

Do houses with a waterfront view or without a waterfront view have more price outliers?

Within the same living square footage range, price is higher for houses having waterfront view than non-waterfront view





#### Boxplot (waterfront/non-waterfront & price)

The boxplot shows:

Median, upper quartile,

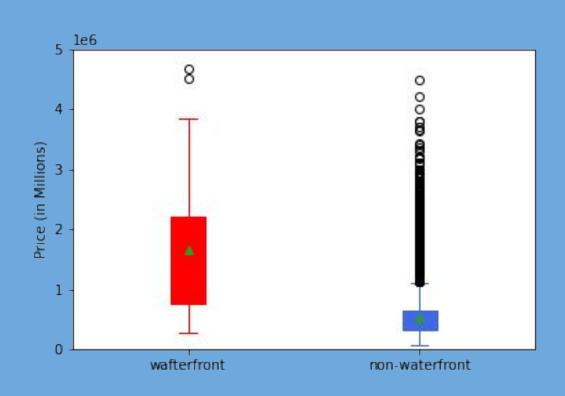
lower quartile,

upper extreme and

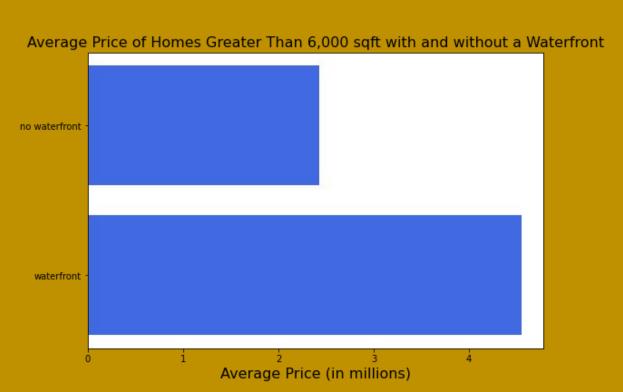
lower extreme for both

Waterfront &

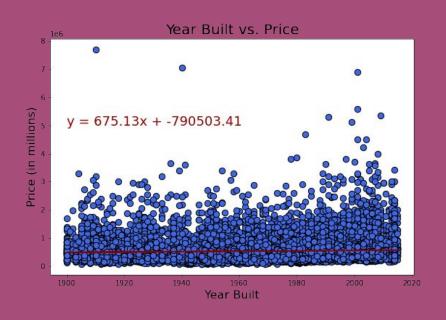
non-waterfront

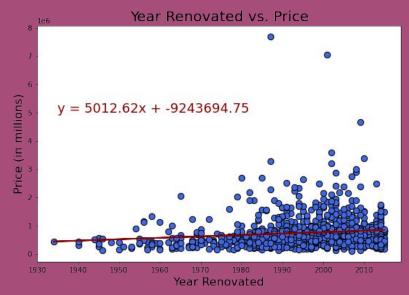


# Do homes larger than 6,000 sqft with a waterfront view cost more or less than those without a waterfront view?



# Do newly built homes cost more than older built homes and where/which zipcodes are the majority of the newly built homes located at?





#### Map of 6 homes built in 2015

Neighborhoods with newest houses:

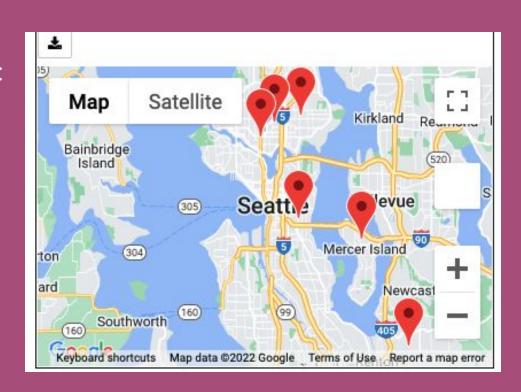
98103 Greenlake

98115 Ravenna/Maple Leaf

98144 Atlantic/Mt. Baker

98040 Mercer Island

98056 Renton



### Conclusion

- Certain house features have a greater effect on price than others
- House prices depend on multiple house features, not only just one
- Limitation:
  - o dataset is only within a 1 year time frame, not most current/ up- to date data
- Lack of inclusivity for folks with disabilities only column in this data set that may indicate some level of accessible housing is number of floors (how many homes are ranch/one level)
- Outlier: Home with 33 bedrooms



# Questions?



