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# House Prices in King County - Recommendations

A guide by Christine Merkel

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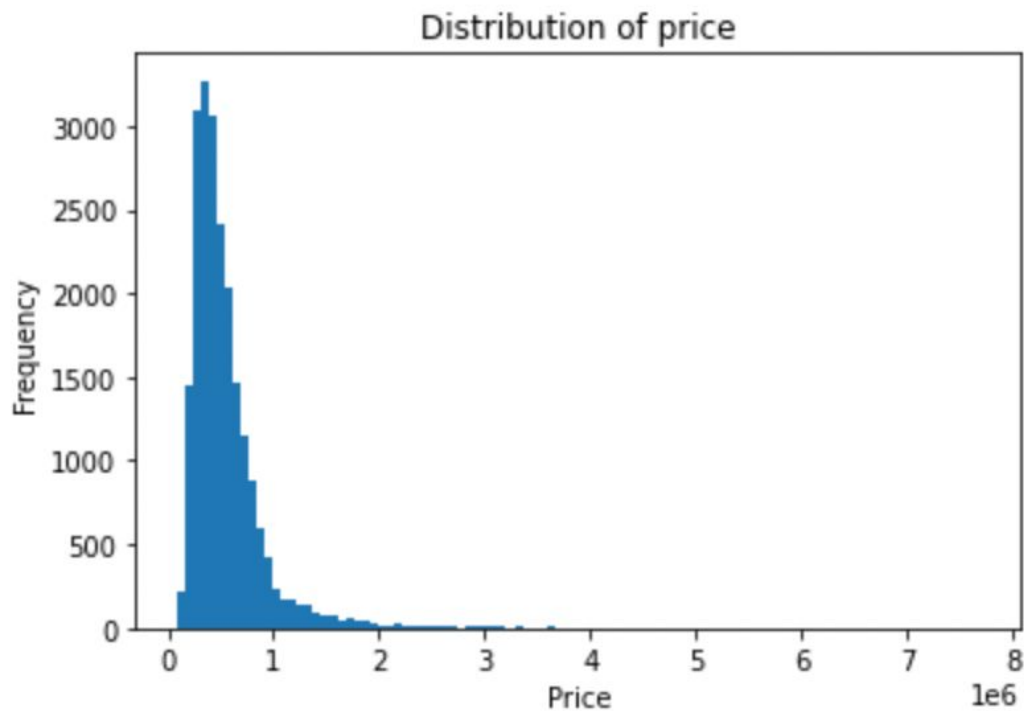
# Stakeholder: Erin Robinson

**Wants:**

- to invest in poor neighborhood
- buying and selling: costs back and little profit
- socially responsible

Data:

Houses sold in King County, Washington in  
May 2014 - May 2015  
21597 observations



Average price:  
540.296\$

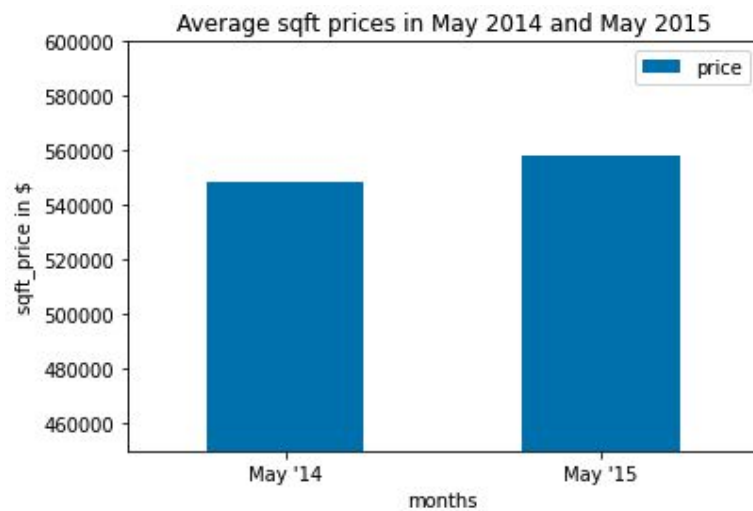
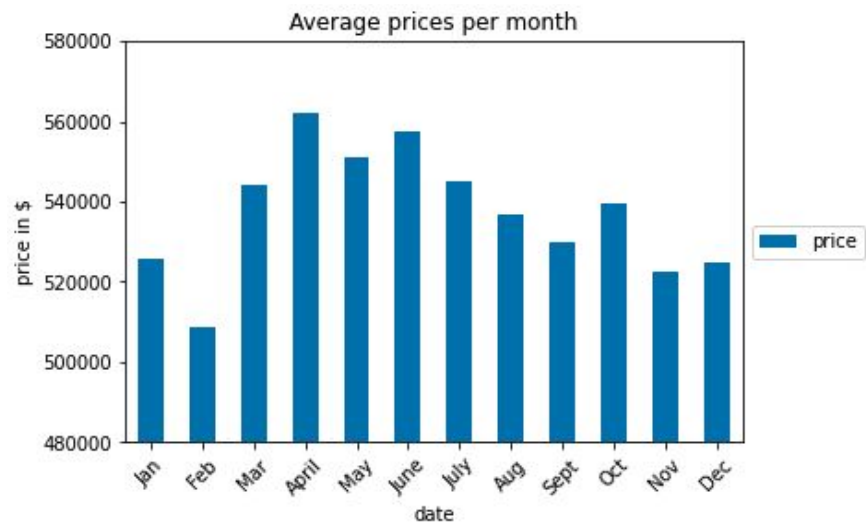
Min:  
78.000\$

Max:  
7700.000\$

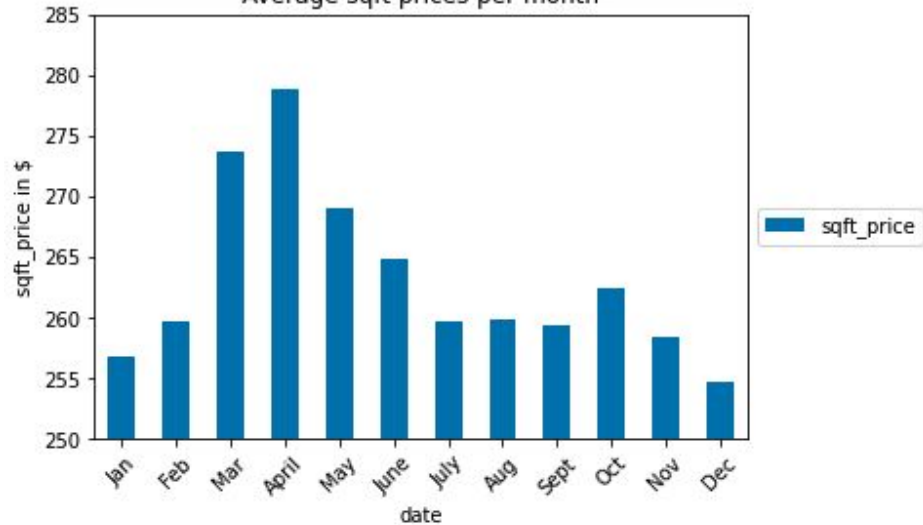
Both were sold in Seattle

Hypothesis 1:

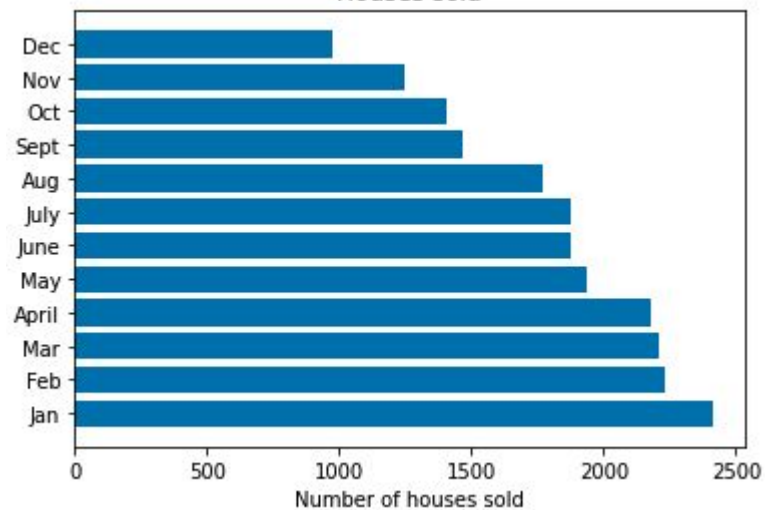
Season might influence the price. Summer could be best time to buy.



Average sqft prices per month



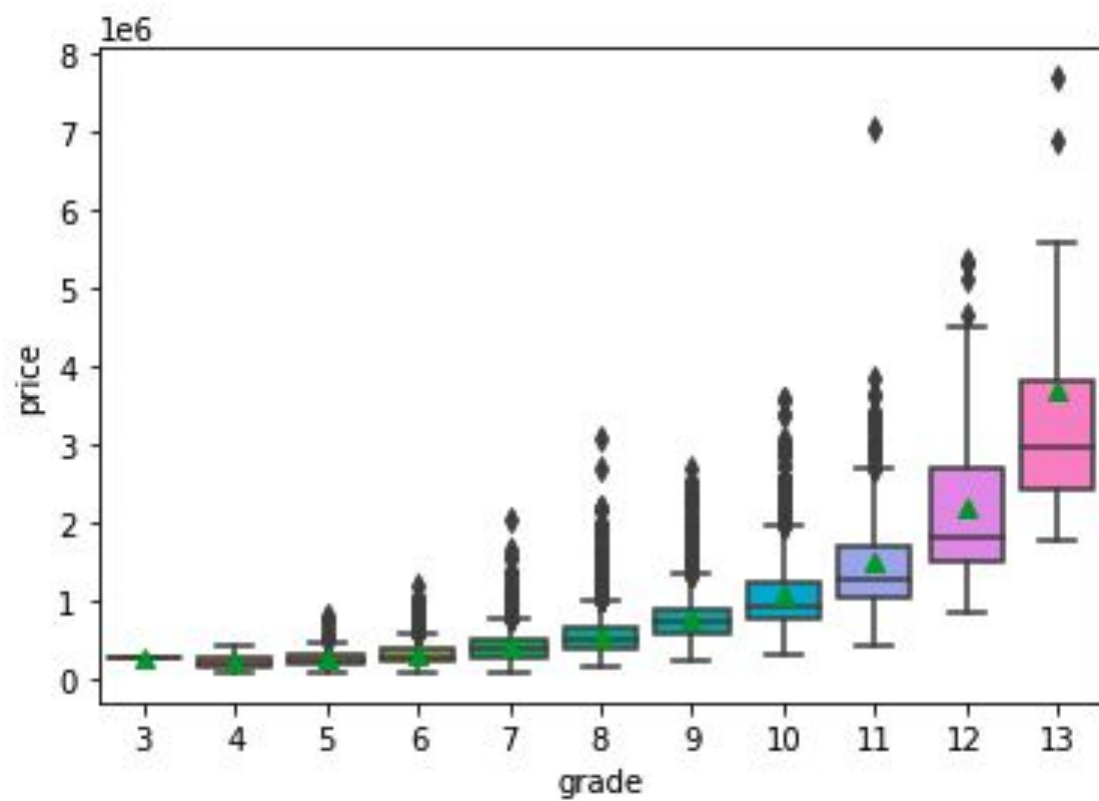
Houses sold

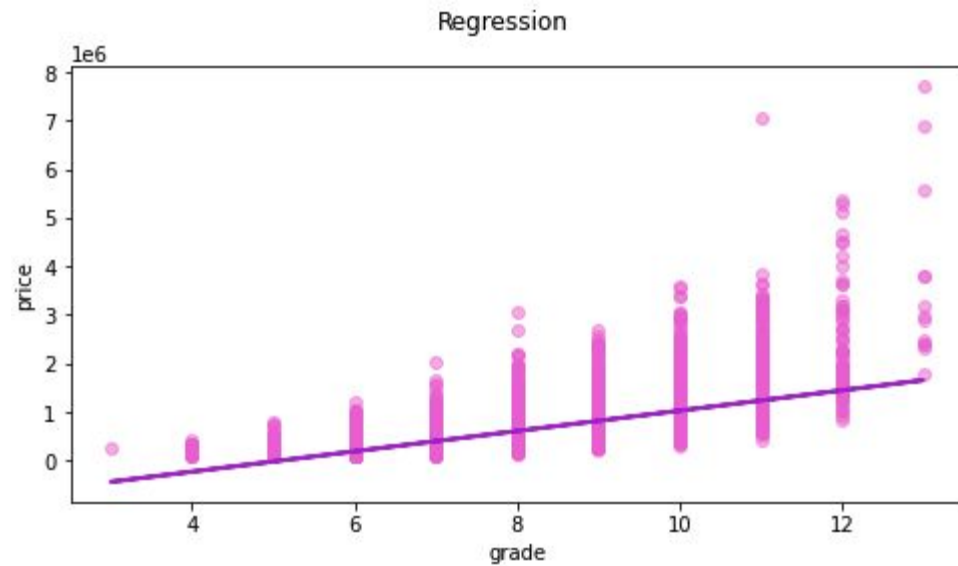


Hypothesis 2:

High grade houses are sold at  
higher price

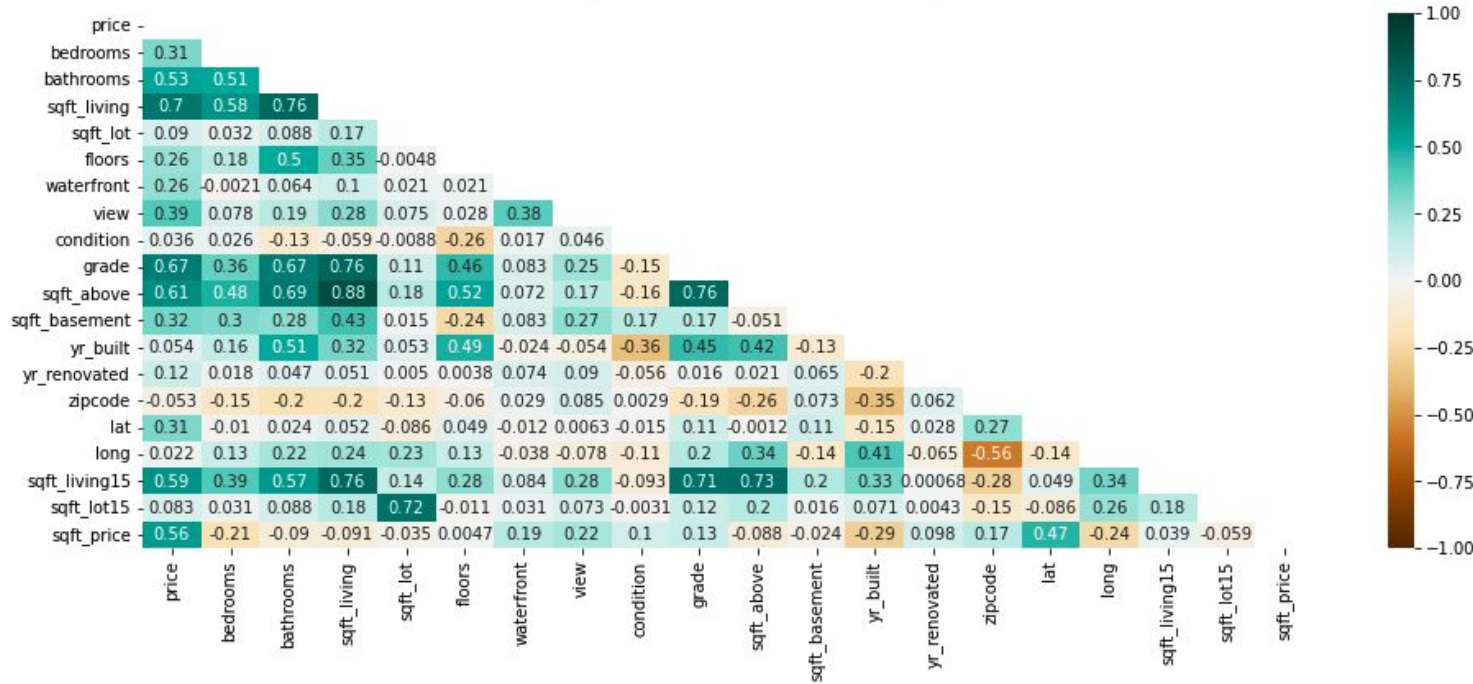






OLS Model:  
R-squared = 0.45  
Prob(F-st.) = 0

# Triangle Correlation Heatmap



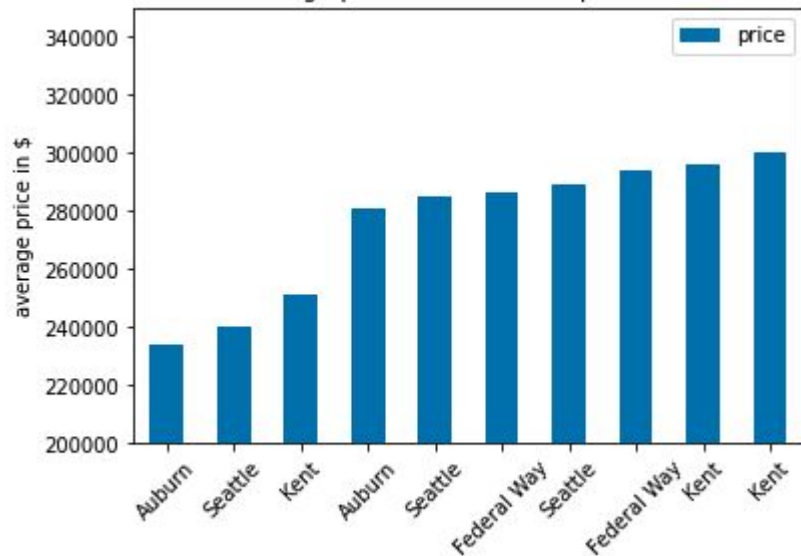
Strongest Correlation:  
 -bathrooms,  
 -Sqft\_price,  
 -sqft\_living15,  
 -sqft\_above,  
 -Sqft\_living,  
 -grade

OLS Model:

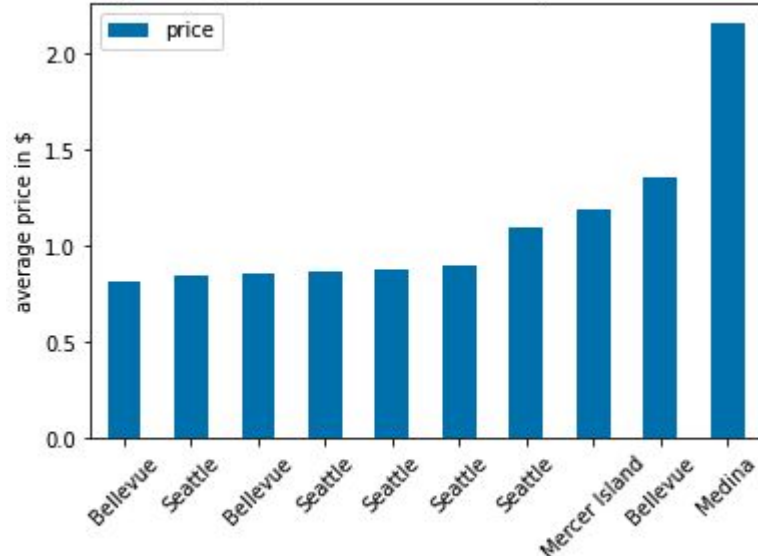
R-squared = 0.882

Hypothesis 3:  
Prices rely on area,  
i.e. zipcode

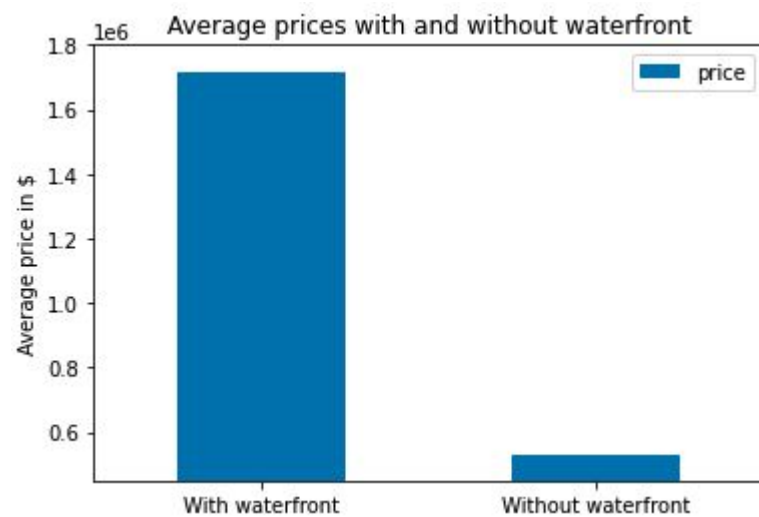
Average prices of the 5 cheapest cities



1e6 Average prices of the 10 most expensive cities







## Recommendations for Erin Robinson:

- Buy lower graded houses, with fewer bathrooms, lower sqft prices
- December seems the best month to buy
- Look here: Auburn, Seattle and Kent
- Avoid: Medina, Shoreline (No waterfront)



