

# EDA- Project

## King County House sales

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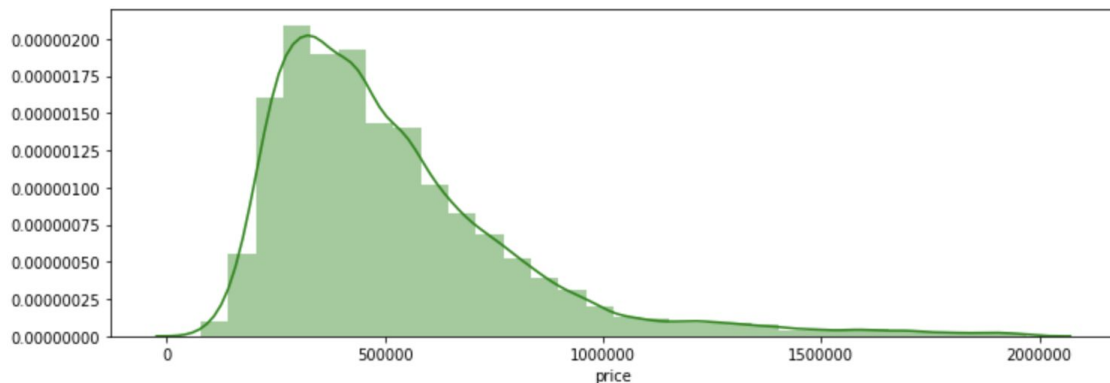
# The story of Peter's disaster

## fixed values:

- he has now 450.000 \$
- the house will be bought in july
- the house is in very good condition
- the house has been renovated in the last 10 years

## changeable values:

- recommendation of the house
- square footage of the house

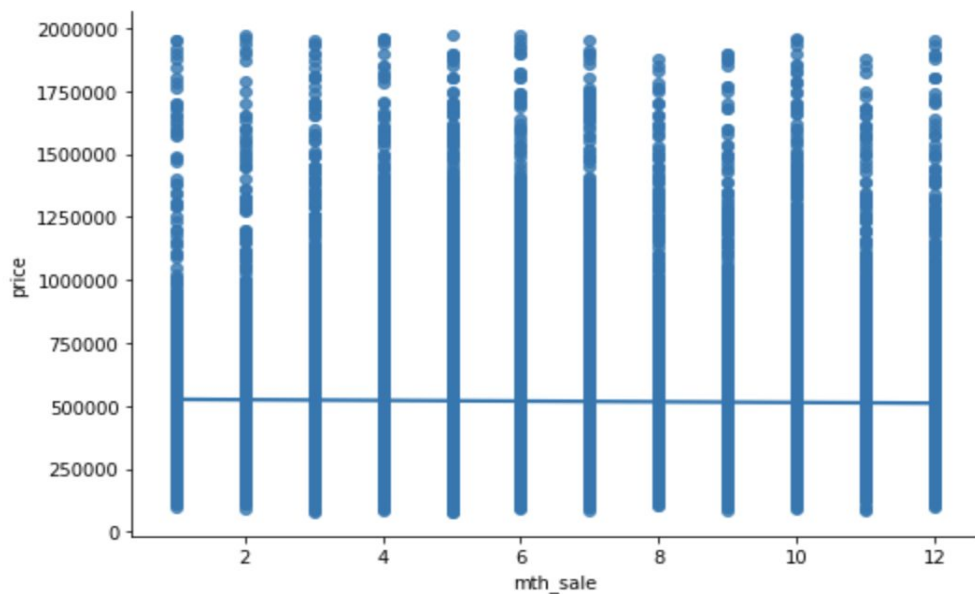


- median 450.000 \$
- the distribution of the price is skew
- use the logarithm to distribute it normally

# The month of buying the house

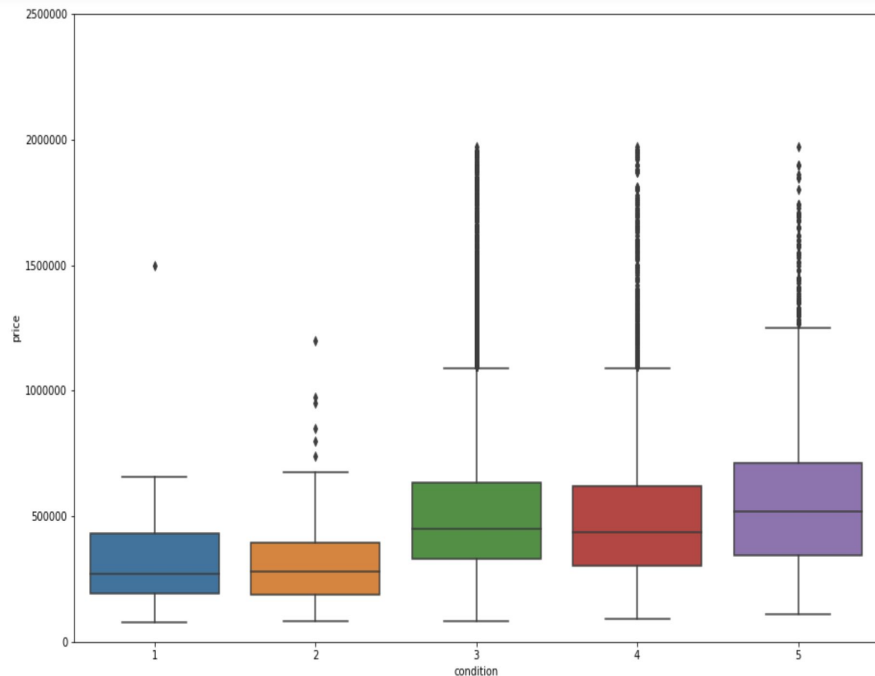
relationship between price and the month of buying the house

```
1 sns.lmplot("mth_sale", "price", data=df, aspect=1.5);
```

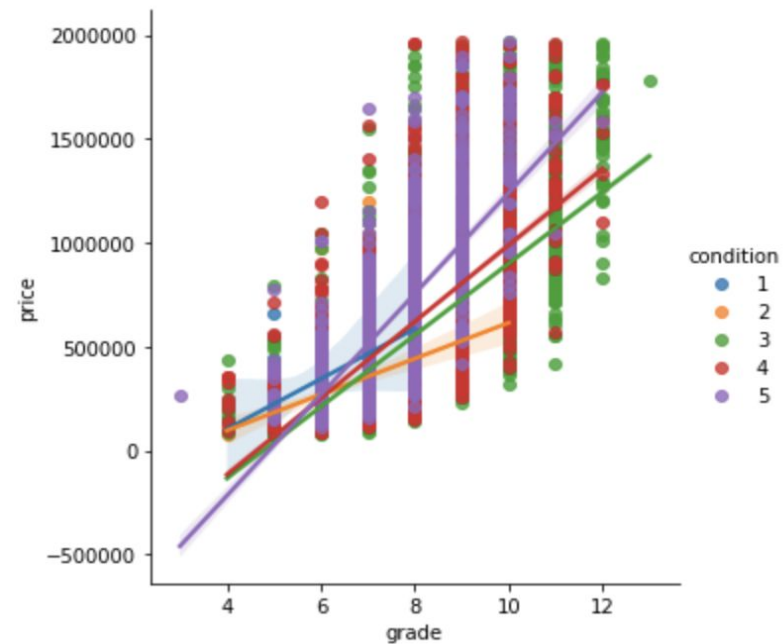


# The condition of the house

relationship between condition and price

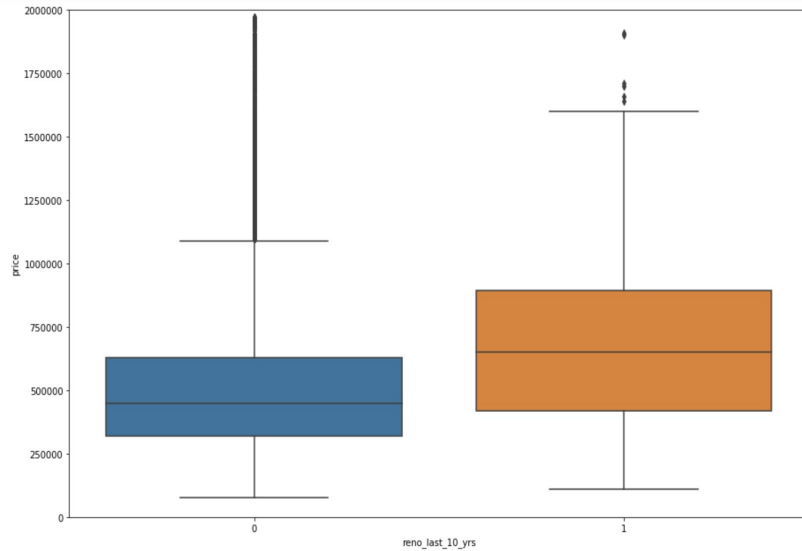


impact of the recommendation

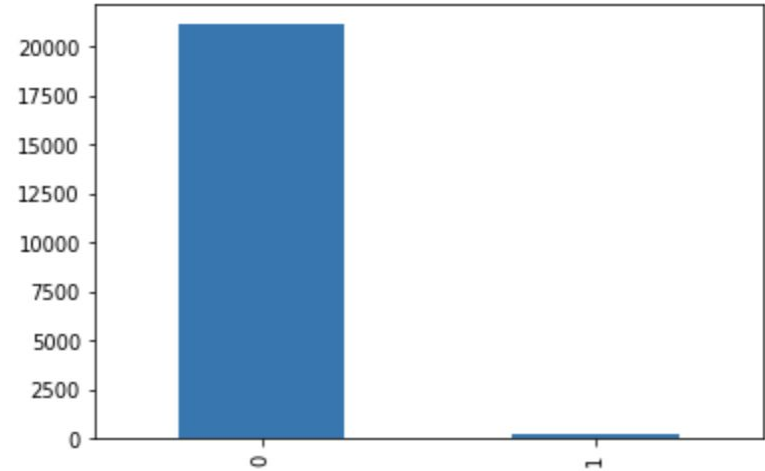


# renovation in the last 10 years

impact of the price if the house has been renovated in the last 10 years

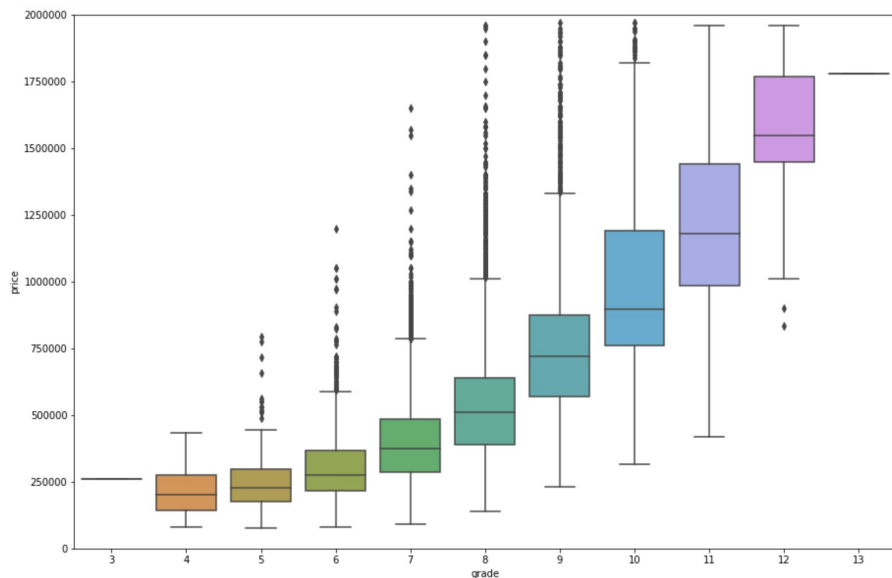


Number of houses that have been renovated in the last 10 years

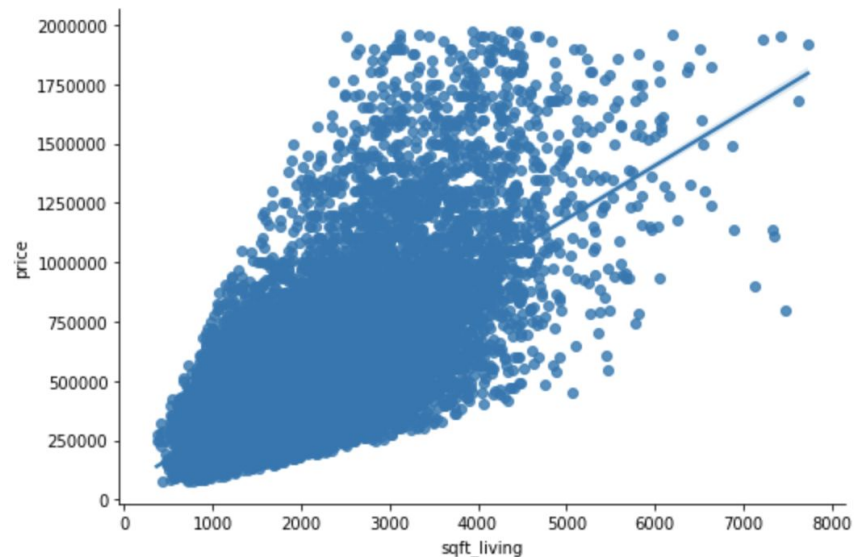


# the greatest impact of the price

recommendation



square footage of the house

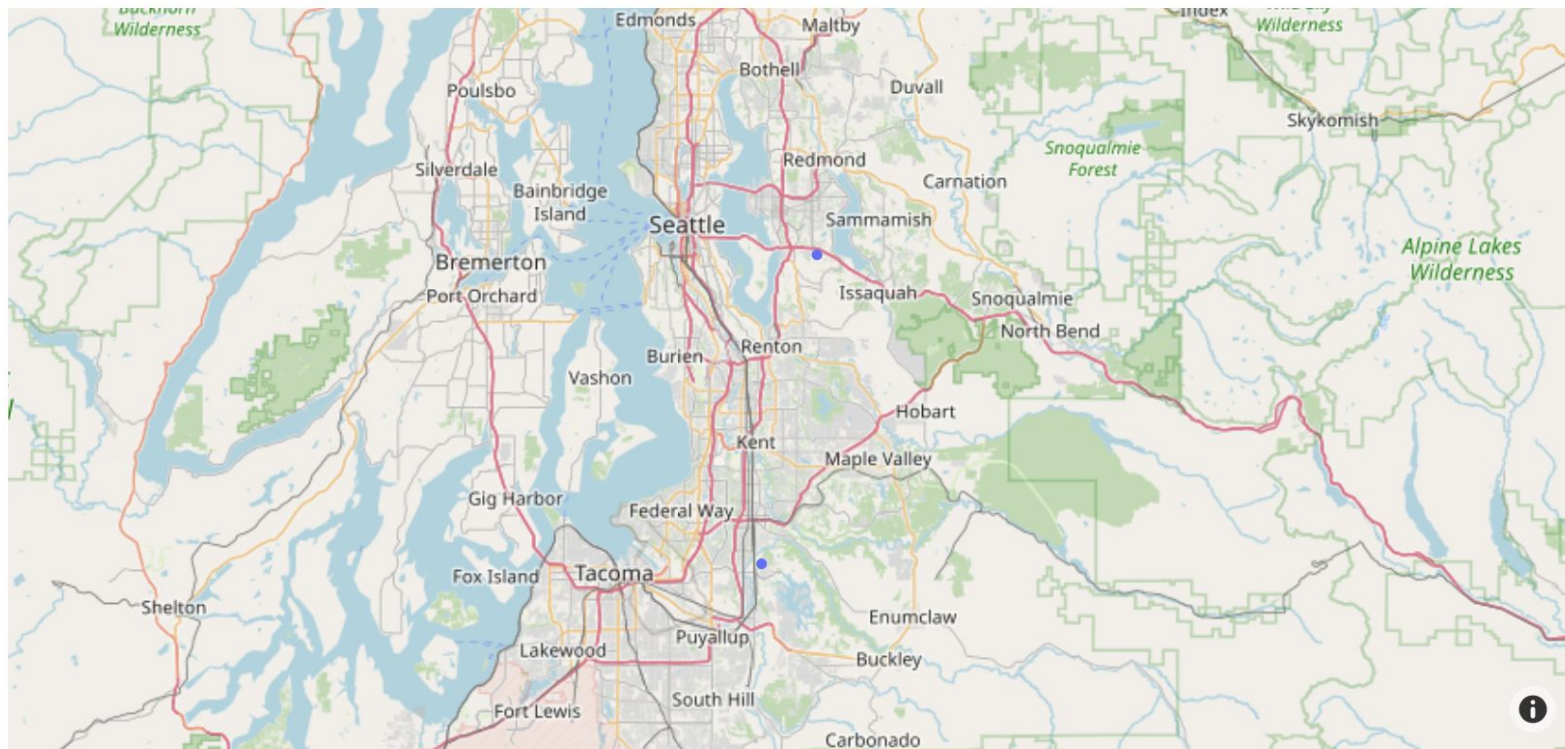


# multivariate linear regression

```
▼ 1 # all the variables that i put in my regression
▼ 2 variable_set = [
  3     "grade", "sqft_living", "condition", "reno_last_10_yrs", "mth_sale",
  4     "bedrooms", "view_yes", "sqft_basement2", "sqft_above", "bathrooms",
  5     "waterfront", "floors"
  6 ]
```

- the model shows that is possible to get a house that costs less than 450.000 \$ and meets the fixed values
- R2: 0,894
- Root Mean Squared Error: 186101,66

# visualization





# Thank you for attention

are there any questions ?

