Predict sales price

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Build a machine learning model to predict the selling prices of houses

OBJECTIVE

To build a model that will predict the price of a house based on features provided in the dataset. Senior management also wants to explore the characteristics of the houses using some business intelligence tools.





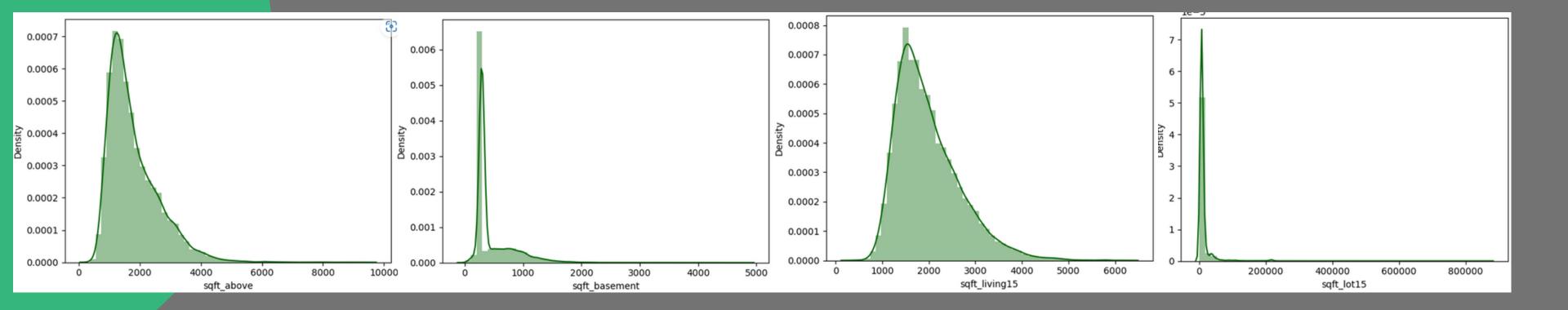


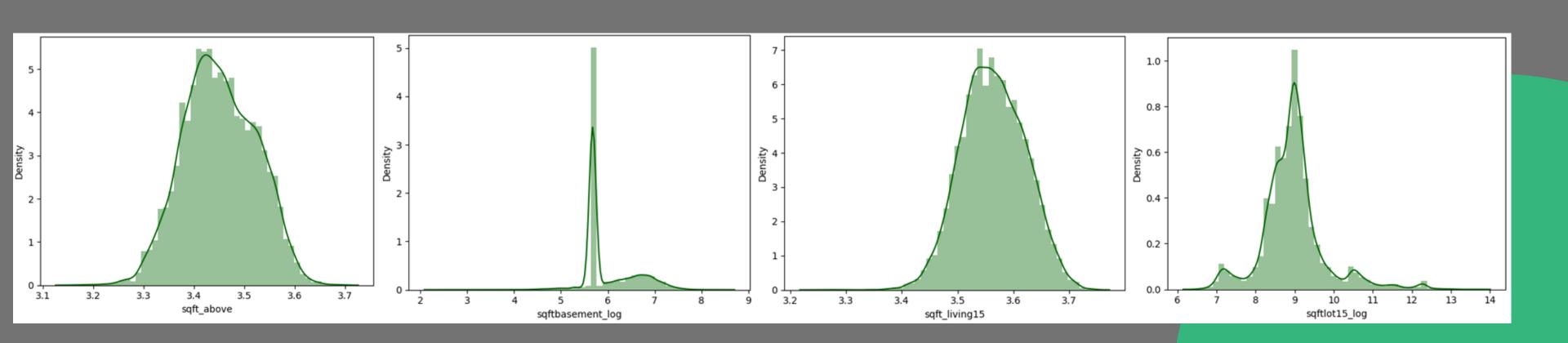
CATEGORICAL DATA

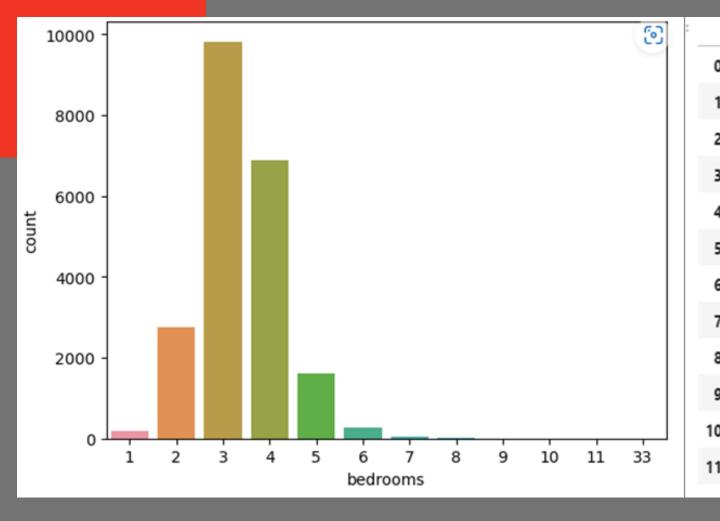
NUMERICAL DATA

- BEDROOMS
- BATHROOMS
- FLOORS
- SQFT_AVOBE
- SQFT_BASEMENT
- YR_BUILT
- ZIPCODE
- LAT
- LONG
- SQFT_LIVING15
- SQFT_LOT15
- PRICE

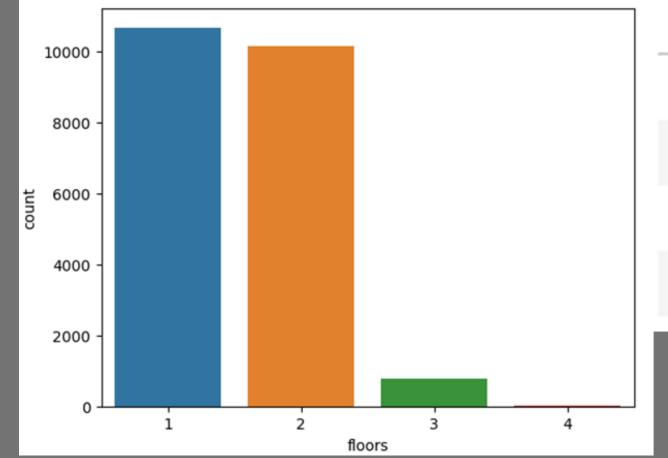
bedrooms -	1	0.49	0.18	0.36	0.48	0.3	0.018	-0.15	-0.01	0.13	0.39	0.031	0.31
bathrooms -	0.49	1	0.46	0.65	0.67	0.24	0.035	-0.21	0.0058	0.24	0.56	0.079	0.48
floors -	0.18	0.46	1	0.41	0.49	-0.24	0.02	-0.019	0.065	0.085	0.24	-0.008	0.26
grade -	0.36	0.65	0.41	1	0.76	0.17	0.014	-0.19	0.11	0.2	0.71	0.12	0.67
sqft_above -	0.48	0.67	0.49	0.76	1	-0.052	0.023	-0.26	-0.0012	0.34	0.73	0.2	0.61
वृft_basement -	0.3	0.24	-0.24	0.17	-0.052	1	0.071	0.075	0.11	-0.14	0.2	0.018	0.32
yr_renovated -	0.018	0.035	0.02	0.014	0.023	0.071	1	0.064	0.029	-0.068	-0.0027	0.0079	0.13
zipcode -	-0.15	-0.21	-0.019	-0.19	-0.26	0.075	0.064	1	0.27	-0.56	-0.28	-0.15	-0.053
lat -	-0.01	0.0058	0.065	0.11	-0.0012	0.11	0.029	0.27	1	-0.14	0.049	-0.086	0.31
long -	0.13	0.24	0.085	0.2	0.34	-0.14	-0.068	-0.56	-0.14	1	0.34	0.26	0.022
sqft_living15 -	0.39	0.56	0.24	0.71	0.73	0.2	-0.0027	-0.28	0.049	0.34	1	0.18	0.59
sqft_lot15 -	0.031	0.079	-0.008	0.12	0.2	0.018	0.0079	-0.15	-0.086	0.26	0.18	1	0.083
price -	0.31	0.48	0.26	0.67	0.61	0.32	0.13	-0.053	0.31	0.022	0.59	0.083	1
	bedrooms -	bathrooms -	floors -	grade -	sqft_above -	_basement -	_renovated -	zipcode -	lat -	- buol	qft_living15 -	sqft_lot15 -	price -

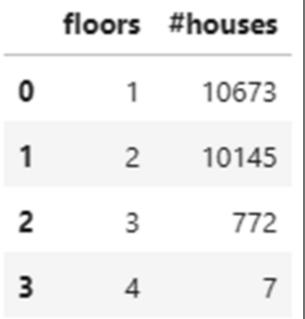


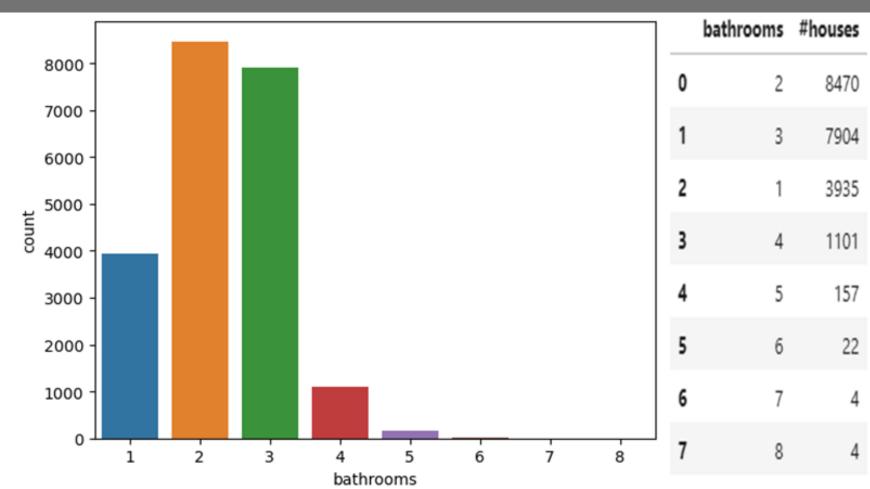


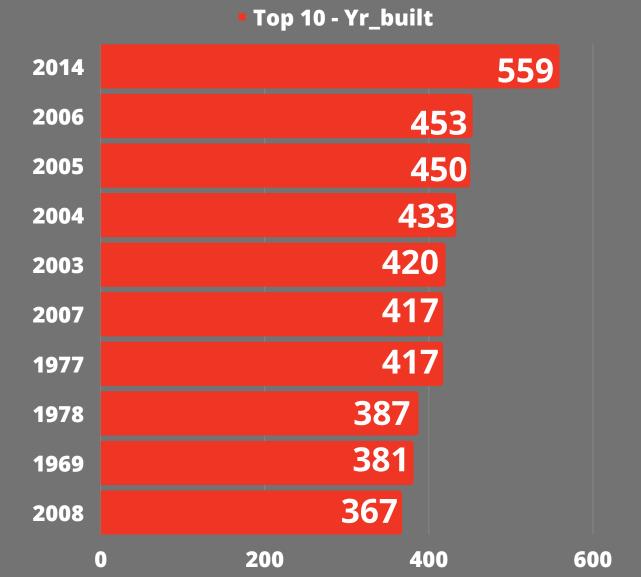


	bedrooms	#houses
0	3	9824
1	4	6882
2	2	2760
3	5	1601
4	6	272
5	1	196
6	7	38
7	8	13
8	9	6
9	10	3
10	11	1
11	33	1









LINEAR REGRESSION

Normalizer

OneHotEncoder

train_test_split

linear_model

r2_score





AVERAGE PRICE
BY BATHROOMS,
BEDROOMS,
YEAR AND
ZIPCODE



AVERAGE PRICE
BY
FLOORS, CONDITI
ON, WATERFRONT
AND VIEW

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