What Criteria Would Effect The House Pricing in Iowa

Trang Khong

List of Criteria affect House Pricing

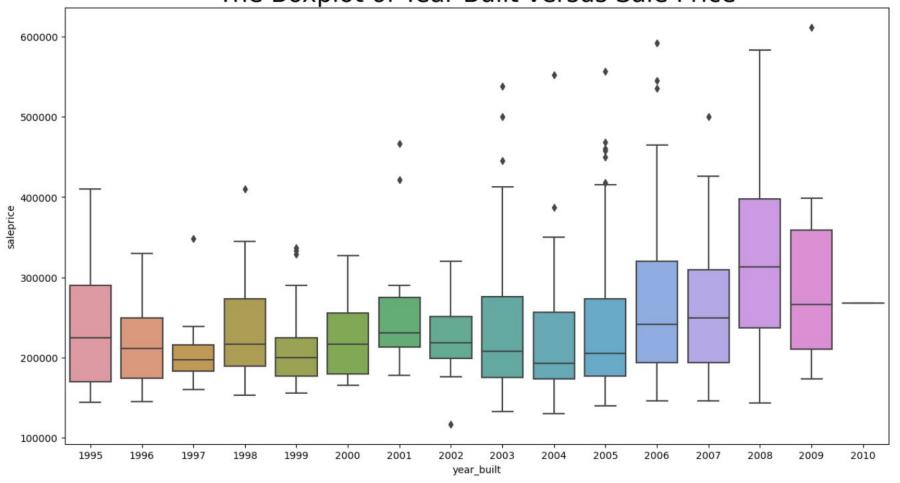
- Original construction date
- The Rates The Overall Material
- Total Square Feet of Basement Area
- Evaluates The Height of The Basement
- First Floor Square Feet
- Total Rooms Above Grade
- Ground Living Area
- Type of Dwelling

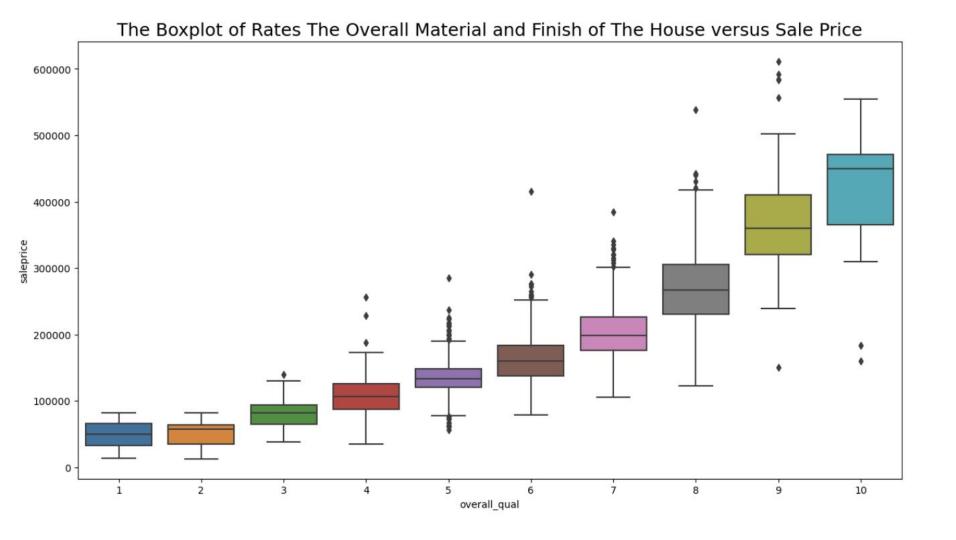
The correlation of sale price with other feature

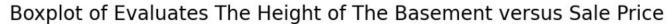
overall_qual -	1	0.6	0.58	0.44	0.55	0.48	0.57	0.52	0.38	0.55	0.59	0.56	0.8
year_built -	0.6	1	0.63							0.78			0.57
year_remod/add -	0.58	0.63	1							0.65			0.55
mas_vnr_area -			0.21	1									0.51
total_bsmt_sf -	0.55			0.41	1	0.81							0.63
1st_flr_sf -					0.81	1	0.56						0.62
gr_liv_area -	0.57					0.56	1	0.62	0.81				0.7
full_bath -							0.62	1					0.54
totrms_abvgrd -							0.81		1				0.5
garage_yr_blt -		0.78	0.65				0.28		0.18	1			0.52
garage_cars -	0.59									0.48	1	0.89	0.65
garage_area -	0.56										0.89	1	0.65
saleprice -	0.8	0.57	0.55		0.63	0.62	0.7				0.65	0.65	1
	overall_qual -	year_built -	ar_remod/add -	mas_vnr_area -	total_bsmt_sf -	1st_flr_sf -	gr_liv_area -	full_bath -	otrms_abvgrd -	garage_yr_blt -	garage_cars -	garage_area -	saleprice -

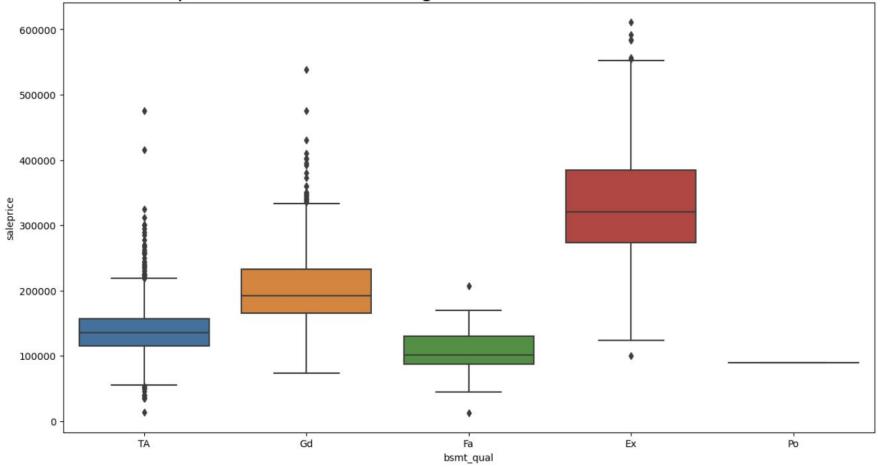
- 0.75



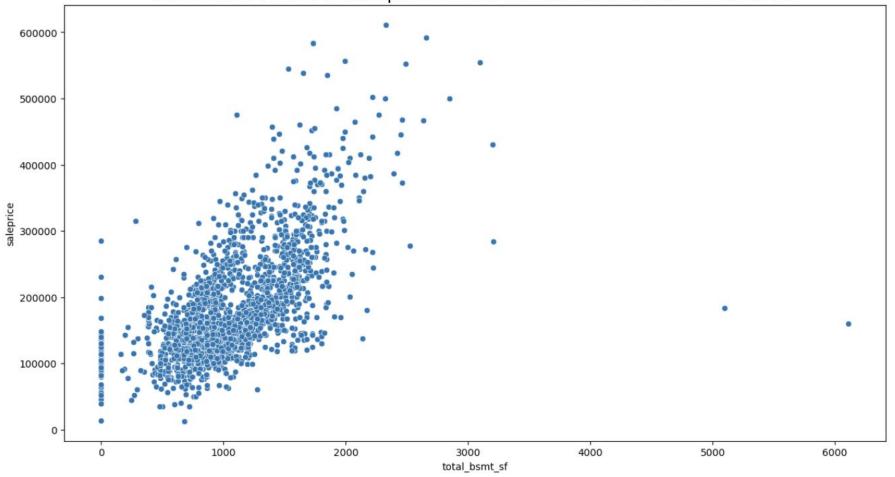






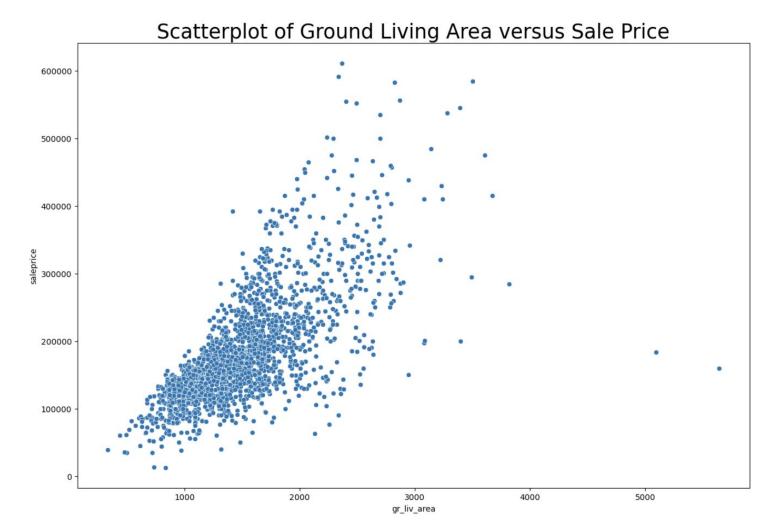


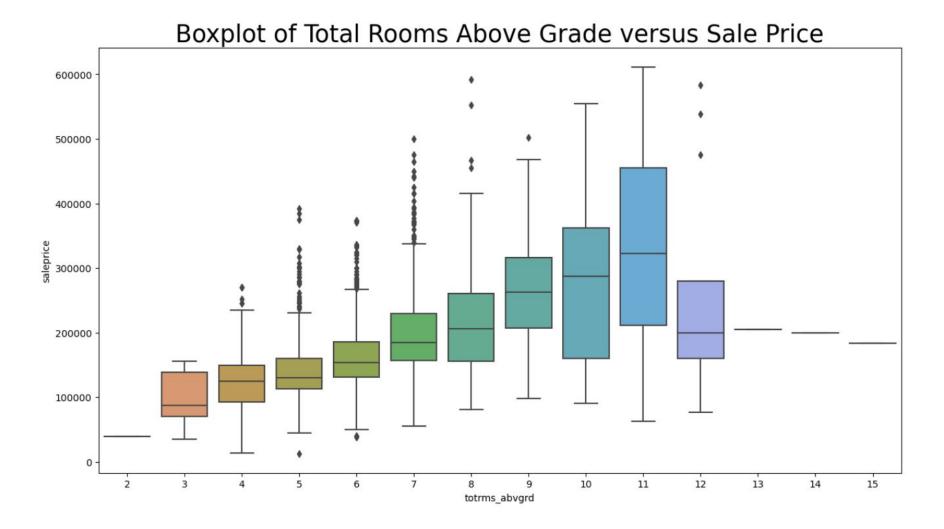




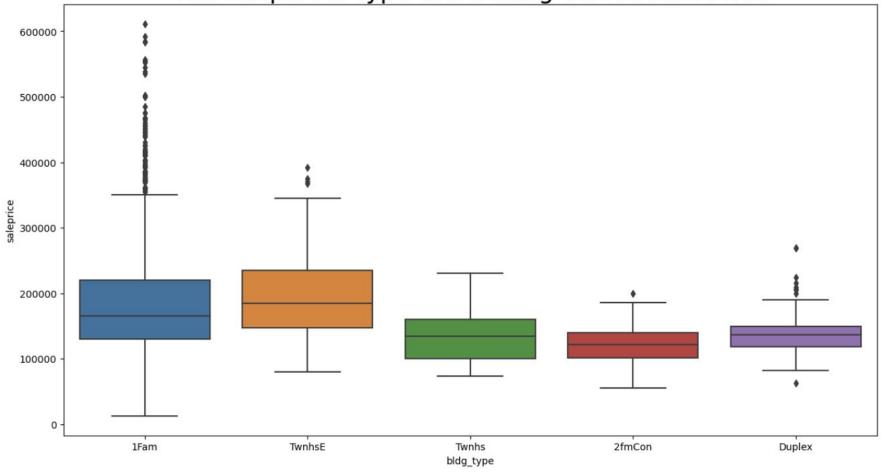
Scatterplot of First Floor Square Feet versus Sale Price saleprice 000000

1st_flr_sf









Conclusion

- A newer house would have a higher price.
- The quality of overall material and finish of the house go up, the sale price go up.
- The total square feet of the basement area, ground living area, and first floor square feet increase the sale price increase.
- Basement have the height above 80 inches would have higher price than others.
- Single family house are popular and have higher pricing.
- Total rooms of house (does not include bathrooms) between 7 and 12 would have higher price than others.

Reference

(<u>https://www.forbes.com/advisor/mortgages/real-estate/what-to-look-for-when-buying-a-house/</u>)

(https://www.whitehouse.gov/cea/written-materials/2021/09/09/housing-prices-and-inflation/))

(https://lovehomedesigns.com/where-are-basements-common/#:~:text=On%20average%2C%20in%20the%20United,%2C%20Oklahoma%2C%20Iowa%2C%20Missouri.)

(http://jse.amstat.org/v19n3/decock/DataDocumentation.txt))