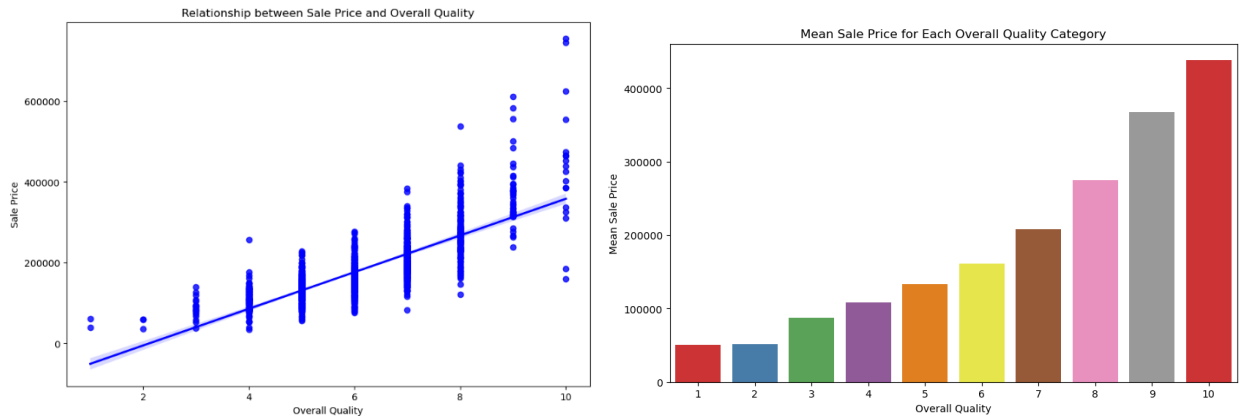


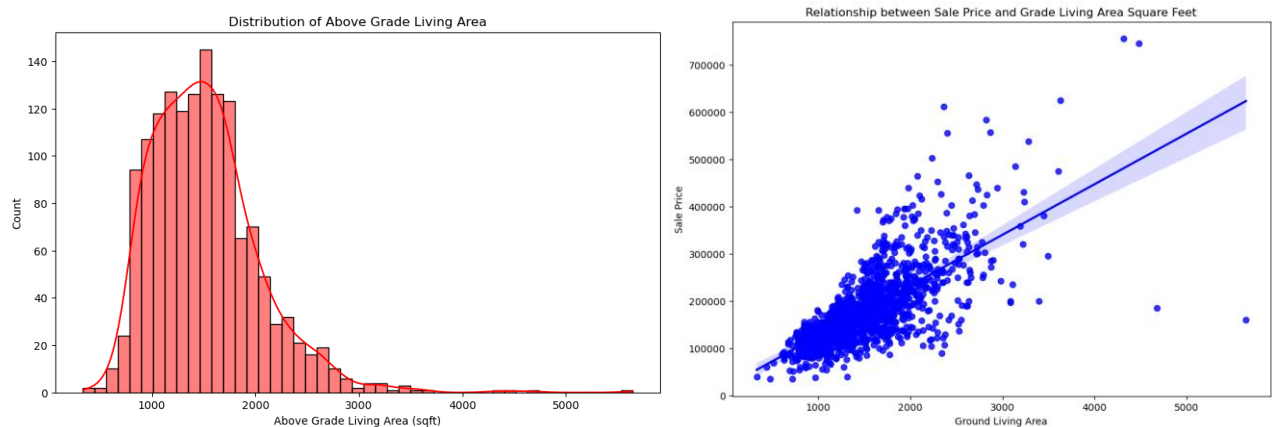
## Summary of Exploratory Data Analysis on House Price Dataset

1. Determine how Overall Material and Finish Quality affects the Property's Sale Price.



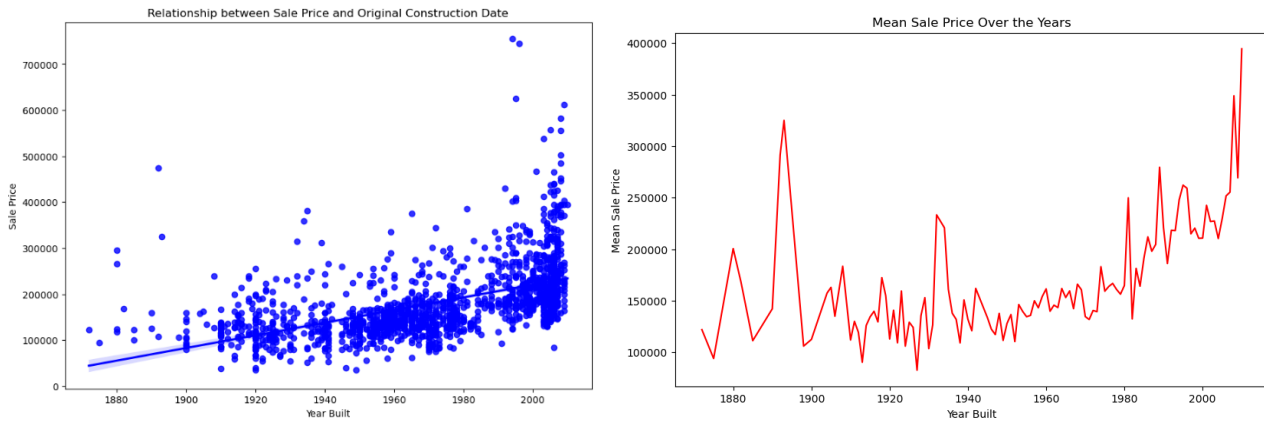
We can observe that the sale prices of the houses increases with the Overall Material and Finish Quality. The quality 10 has the most highest sale prices while the house graded 1 has the least selling price and the prices move up exponentially. The Mean Sale Price graph clearly describes the linear relation between sale price of house and its overall quality.

2. Determine if there is relation between Property's Sale Price and Above Grade (ground) Living Area Square Feet.



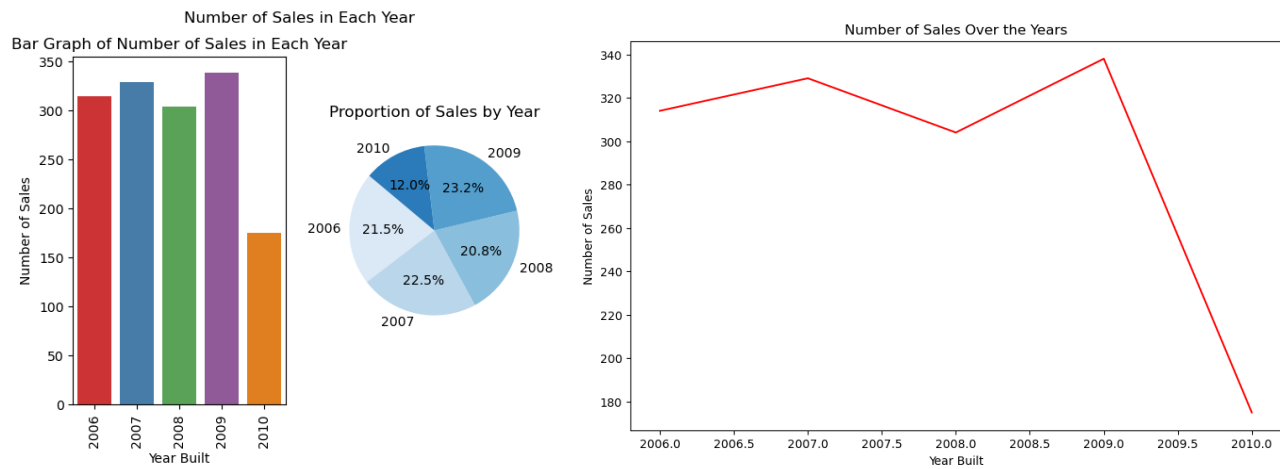
The above scatter plot with the regression line shows the linear correlation between sales price of the houses and the ground living area in square feet. As the ground living area in square feet increases, the price of the house automatically increases.

### 3. Determine if Original Construction Date affects the Property's Sale Price.



The above line graph and regression plot describes that the newer the construction date, more valued is the house. There is strange observation for the houses built from 1890-1900. These houses have higher sale prices than the houses built until 2000 and beyond that there is steep rise in the sale prices of the houses.

### 4. Determine how the Number of Sales have changed over the Years.



The above bar graph and pie chart shows the number of sales in the years 2006-2010 and the most sales are in the year 2009 and least in 2010. The line graphs clearly shows a negative trend which means the number of the sale of houses has gone down steeply from 2009 to 2010 due to the increasing sale prices of the houses.

- It is clearly noticeable that sale price of the house varies with the style of house.
- Two and one-half story (with 2nd level finished) houses have maximum sale price followed by two story houses with a very less margin.
- Houses with One and one-half story (with 2nd level unfinished) have lowest sale price.