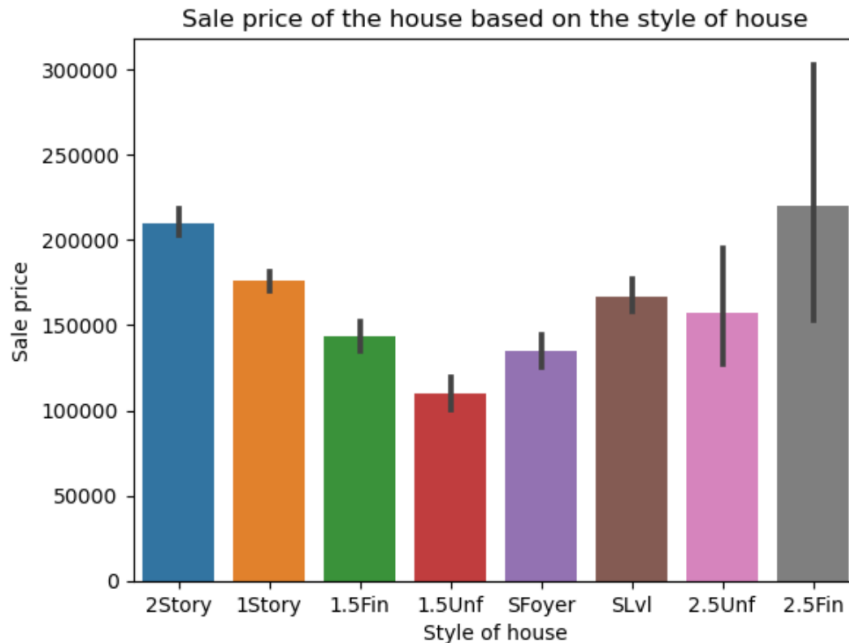# Summary of Exploratory Data Analysis on House Price Dataset

1. **Determine if the sale price of a house is affected by style of house.**

Sale price of the house based on the style of house

- 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.

2. **Determine if the date of remodeling has any effect on the sale price of the house.**


Sale Price vs. Remodel date
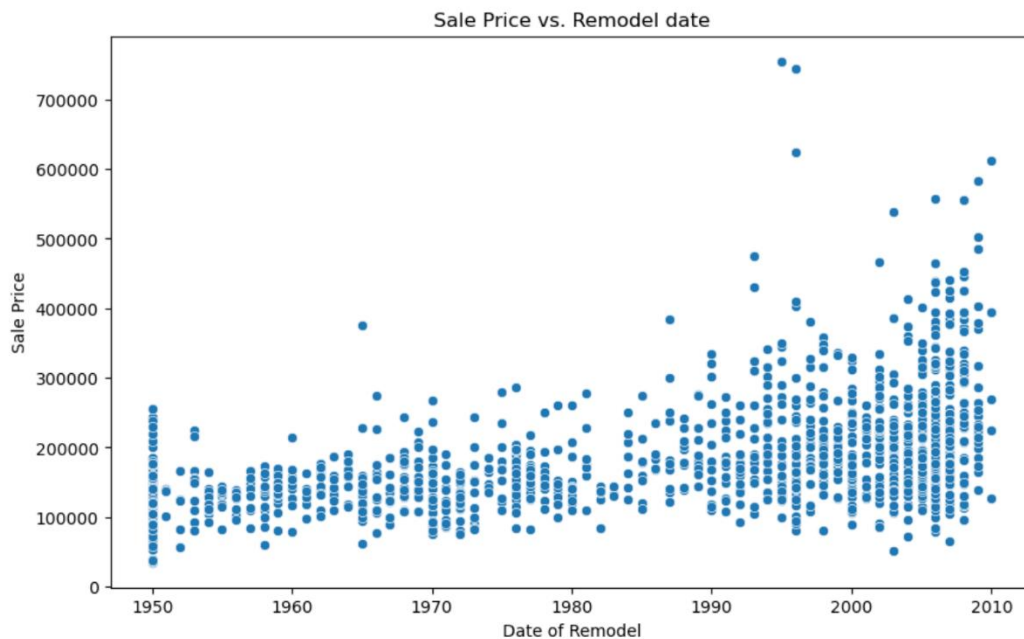
- As seen in the above scatterplot, year of remodeling shows linear relationship with the sale price of the house.
- The houses which were remodeled recently had more sale price as compared to those who were remodeled in the early years.

3. **Determine if the sale price of the house varies with Land Contour.**
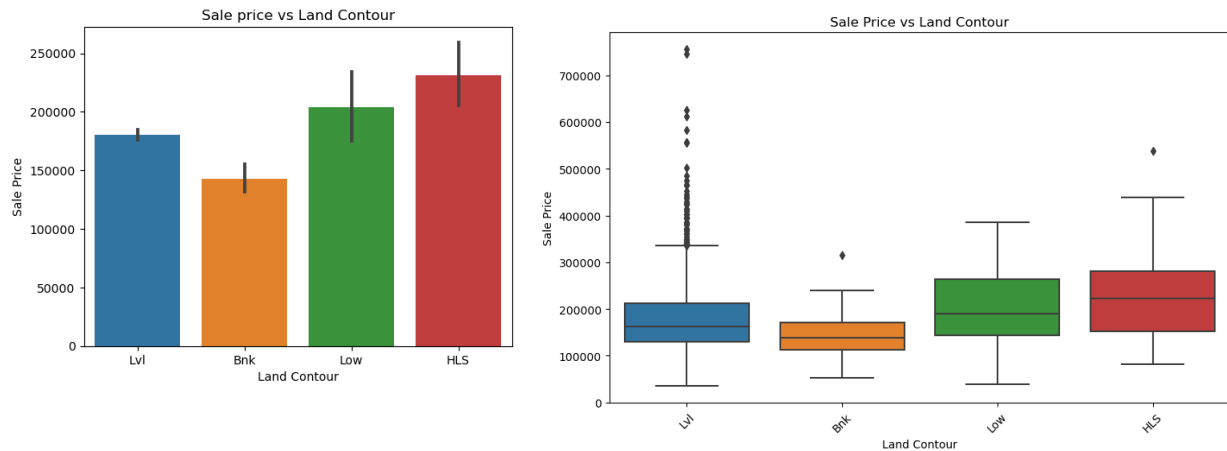
- The above figures showsthat sale price of the house varies with Land Contour.
- Hillside houses have maximum sale price while the banked houses have minimum sale price.

4. **Determine if the sale price of the house is affected by number of full bathrooms.**
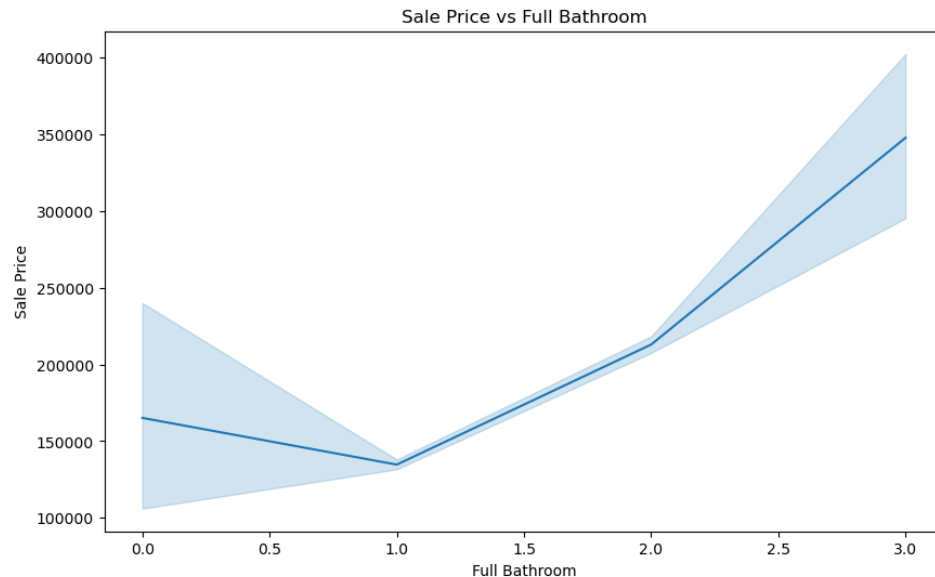
- Surprisingly, houses with 0 full bathrooms have higher sale prices than those with 1 full bathroom. However, households with 3 full bathrooms have maximum sale price.

5. **Determine if the garage area changes with the year the garage was built.**

Garage Area vs Year the garage was built
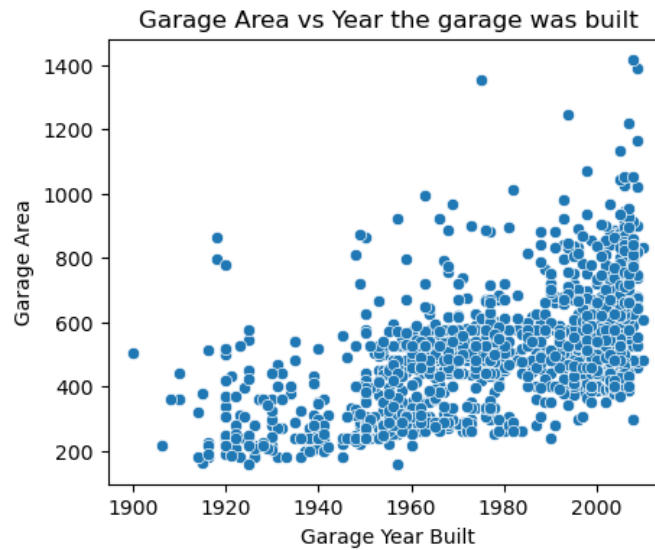
- The above scatter plot shows that the garage area increased with the year that garage was build. The early 1900s have smaller garage areas as compared to the garages built in the year 2000 with approximate difference of 1200 sq feet.

6. **Determine the trend of house sales over the years.**

Number of Sales Over the Years
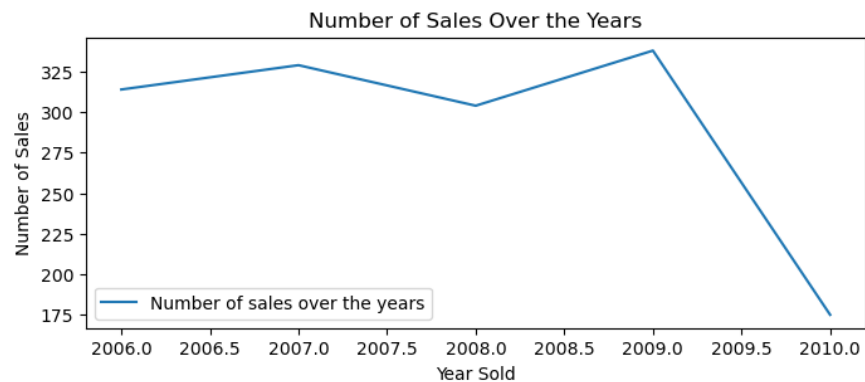
- The sale of houses have varied over the years. Maximum houses were sold in the year 2009 while minimum were sold in the year 2010.