House Property Sales Business Problems -

Data Cleaning

1. Check for inconsistencies in the data.
2. Identify and handle missing values
3. Identify and address potential errors or anomalies in the data

Exploratory Data Analysis (EDA)

1. Which date corresponds to the highest number of sales?
2. Which postcode has the highest average price for total sales?
3. Which year witnessed the lowest number of sales?
4. Which are the top 6 postcodes with highest revenue generated from sales for each year?
5. What is the most common number of bedrooms?
6. Find the number of properties sold in each quarter of 2017

Statistical Analysis

1. What is the median property price?
2. Determine the year with the highest median property price?
3. Determine the outliers in the dataset using Interquartile range (IQR)
4. Determine the percentage of properties with prices above the average price

Time Series Analysis

1. Calculate the total number of sales for each quarter?
2. Calculate the total revenue from sales for each quarter?
3. Identify the month with the highest total sales for each year (Seasonal Analysis).
4. Calculate a 3-month moving average of property prices.
5. Calculate the year-over-year percentage change in property prices for each postcode.

Data Visualisation

1. Plot the 3-month moving average of property prices.
2. Plot the total number of sales for each quarter.
3. Plot the total revenue of sales for each quarter.
4. Find the price change over time for each postcode.
5. Plot the price outliers
6. Plot the year-over-year and month-over-month percentage change in property prices for each postcode.