**House Price Prediction Project :**

1. **Introduction**

This project aims to predict house prices based on various features.

1. **Methodology**

The project employs data exploration, cleaning, feature engineering, and visualization techniques to understand the relationships between features and sale prices. Statistical analysis and machine learning models can be employed (details not included in the provided code).

1. **Requirement Analysis**

The primary requirement is a dataset of house prices with associated features. Data cleaning, including handling missing values and outlier detection, is crucial. Feature engineering, such as creating new features from existing ones and encoding categorical features, is also necessary.

1. **Other Parameters depending upon the Projects**

Model evaluation metrics (if applicable), specific machine learning algorithms used, and performance tuning details.

1. **All Visualization like All Charts which is there in the Dashboards**

Scatter plots of SalePrice vs. YearBuilt, YearRemodAdd, LotArea, Histograms of continuous features (e.g., LotArea, TotalBsmtSF), Bar plots of mean SalePrice grouped by categorical features (MSZoning, BldgType), Boxplot of SalePrice, Correlation matrix heatmap.

1. **Insights from the Charts as well as Dashboards**

* Houses built more recently tend to have higher sale prices.
* Lot area shows some correlation with price, but might have outliers.
* MSZoning categories affect the mean sale prices significantly.
* Outliers were identified in SalePrice and LotArea.
* Certain continuous features appear to have a skewed distribution before applying logarithmic transformation.
* Feature engineering, such as creating 'HouseAge' and 'IsNewHouse' features, was performed to better capture temporal relationships.

**7. Conclusion**

The project demonstrates how various analysis techniques can be used to explore house price data. Further analysis and modeling will be needed to complete the prediction aspect. Logarithmic transformation was used on continuous variables to improve normality.