**Project: Predicting Price per Sqft with Linear Regression**

**Introduction**

This project aims to predict the price per square foot using a Linear Regression model based on a dataset with 7120 rows and 108 columns. The dataset includes features such as the number of bedrooms, bathrooms, balcony presence, total square footage, and various location indicators.

**Steps Taken**

**1. Data Preprocessing:**

Imported necessary packages for analysis.

Loaded and explored the dataset.

Checked for null values (no null values found).

Copied the data for preprocessing.

**2. Exploratory Data Analysis (EDA):**

Conducted correlation analysis.

Created a heatmap for selected variables.

Visualized data for insights.

**3. Modeling with Linear Regression:**

Selected relevant features for the model.

Trained a Linear Regression model using sklearn.

**Evaluated the model with metrics:**

R-squared Score: 77.58%

Root Mean Squared Error (RMSE): 1187.94

**Conclusion**

The Linear Regression model achieved a satisfactory R-squared score of 77.58%, indicating its capability to explain the variance in the price per square foot. The RMSE value of 1187.94 provides an understanding of the model's prediction accuracy. Further analysis and model refinement can be explored to enhance predictive capabilities.