# Housing Price Prediction - ML Project Report

This project demonstrates the use of Linear Regression to predict housing prices based on features such as area, number of bedrooms and bathrooms, and age of the house.

## Load and Explore the Data

- Dataset: sample\_housing\_data.csv

- Features: Area (sqft), Bedrooms, Bathrooms, Age (years)

- Target: Price

#### **Data Visualization**

Visualized relationships between features and price using scatter plots and correlation heatmap.

### Train-Test Split & Model Training

Split data into 80% training and 20% testing. Trained a Linear Regression model on training data

#### **Model Evaluation**

Made predictions on test data. Calculated evaluation metrics:

Mean Squared Error: 110829179.80

R<sup>2</sup> Score: -0.11

### **Actual vs Predicted Plot:**

