TASK-01
Implement a linear regression model to predict the prices of houses based on their square footage and the number of bedrooms and bathrooms.

🏠 Housing Price Prediction using Linear Regression

This repository contains my implementation of a **Linear Regression Model** to predict housing prices based on essential features like **square footage**, **number of bedrooms**, and **number of bathrooms**.

Technical Highlights

- **Language & Tools**: Python, NumPy, Pandas, Matplotlib, and Scikit-learn.
- **Workflow**:
    1. **Data Preprocessing**: Cleaned and handled missing values to prepare a high-quality dataset.
    2. **Feature Engineering**: Analyzed and scaled key features to optimize the regression model.
    3. **Model Development**: Implemented a Linear Regression model using Scikit-learn.
    4. **Evaluation**: Measured performance using metrics like **Mean Squared Error (MSE)** and **R^2**.
- **Visualization**: Presented trends and patterns in the data through clear visualizations.

How to Use

1. Clone the repository.
2. Install required libraries (`pip install -r requirements.txt`).
3. Run the notebook to train the model and evaluate results.

Future Scope

- Integrating more features like location data.
- Exploring advanced regression techniques for enhanced accuracy.

Feel free to check out the code, and feedback is always welcome! 😊