**Project Report on Housing Price Prediction**

**1. Introduction**

This project predicts house prices using machine learning. Features like rooms, land size, year built, suburb, type, and distance are used. Linear Regression and Lasso Regression models are applied to train and test the data.

**2. Literature Survey**

- Housing price prediction is common in real estate.  
- Past studies used regression models.  
- Machine learning methods like Linear Regression, Lasso, and Tree models are widely used.  
- Lasso helps in reducing less useful features.

**3. Block Diagram**

Dataset → Preprocessing → Feature Selection → Train/Test Split → Model Training → Prediction → Evaluation

**4. Algorithm / Flowchart**

Steps:  
1. Load dataset.  
2. Clean missing values.  
3. Convert text columns to numbers (one-hot encoding).  
4. Split into training (70%) and testing (30%).  
5. Train model (Linear & Lasso).  
6. Predict house prices.  
7. Check error (MSE) and plot results.

**5. Results**

- Model: Linear Regression & Lasso Regression.  
- Error measure: Mean Squared Error (MSE).  
- Actual vs Predicted graph shows both lines are close → good prediction.

**6. Accuracy**

- Lasso regression gives better accuracy by reducing extra features.  
- Low MSE means predictions are close to actual values.