**New York House Price Prediction**

**Overview:**

**This project predicts house prices in New York using a linear regression model. The dataset includes features like square footage, bedrooms, and location.**

**Project Structure:**

* **Datasource: The data has been downloaded from Kaggle.**
* **https://www.kaggle.com/datasets/nelgiriyewithana/new-york-housing-market**
* **notebook: Jupyter notebook used for data exploration, preprocessing, and model training.**
* **Trained model: File with the trained model.**

**Steps:**

1. **Exploratory Data Analysis.**

**a) Univariate, Bivariate Analysis**

**b) Missing Value Treatment.**

**c) Changing data types.**

**d) Feature Engineering**

**c) Feature Extraction**

**e) Encoding**

1. **Model Building.**

**a) Checking for assumptions of Linear Regression.**

**b) Fitting the model.**

1. **Model Improvement.**
2. **Model Evaluation.**

**a) Scores – R-Squared**

**b) Errors – Mean Squared Error, Root Mean Squared Error, Mean Absolute Error**

1. **Business Interpretation.**

**Results:**

* **The model achieved an accuracy of 92% on the test set.**