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# Exp 4: Polynomial Regression

**AIM:** To Understand and Implement the Polynomial Regression.

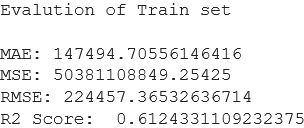
**Problem Description:**

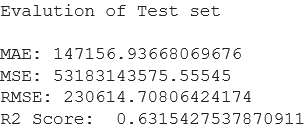
Polynomial Regression explains the relationship between the independent and dependent variables when the dependent variable is related to the independent variable having an nth degree. We will apply this method to the house price dataset which has 21 different independent variables like bedrooms, sqft\_living, view, grade, etc and the dependent variable is the price. For better understanding, we will evaluate and compare the results(MAE, MSE, RMSE & R2 score) of Polynomial Regression with Linear Regression.

**Procedure:**

1. Import the required Libraries
2. Import and Load the Dataset
3. Split the Dataset into Train and Test Data
4. Apply the Linear Regression to the dataset using the method LinearRegression() from sklearn.linear\_model
5. Now, apply the Polynomial Regression to the dataset using the method LinearRegression() from sklearn.linear\_model
6. Evaluate and Compare the results from both models.

**Results:**

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