**Compare results with Mean Absolute Error (MAE) and RMSE.**

**1. Train/Test Split:**
The dataset is divided into two parts which are the training and testing.

- **Training set**: used to teach the model how to find relationships between variables.
- **Testing set**: used to evaluate how well the model performs on unseen data.
  A common split ratio is **80% training** and **20% testing**.

**2. Regression Model:**
Regression is a supervised learning algorithm that predicts a continuous value (for example, predicting price, temperature, or score).
In this assignment, we'll use **Linear Regression**, one of the simplest and most interpretable models, to find a relationship between input features and target values.

**3. Evaluation Metrics:**

- **Mean Absolute Error (MAE)**: measures the average magnitude of errors in predictions (ignores direction).

  MAE=1n∑|yi−yi^|MAE = \frac{1}{n}\sum |y_i - \hat{y_i}|MAE=n1∑|yi−yi^|

- **Root Mean Square Error (RMSE)**: measures the square root of the average squared differences between predicted and actual values.

  RMSE=1n∑(yi−yi^)2RMSE = \sqrt{\frac{1}{n}\sum (y_i - \hat{y_i})^2}RMSE=n1∑(yi−yi^)2

Lower MAE and RMSE indicate better performance.