Task 1 (Linear Regression Model)

This is a task to make expenses predictions based on BMI using the linear regression model.

**Main Steps and Methods:**

Data Preprocessing:

* Read the insurance.csv dataset using Pandas.
* Include BMI as a feature and the expenses as a target variable.

Splitting the Data:

The dataset is divided into training, 80%, and testing, 20% using train\_test\_split() from scikit-learn.

Linear Regression:

Train a model of LinearRegression from scikit-learn with x\_train and y\_train.

The fitted model makes predictions of expenses on the test set (y\_pred).

Visualisation:

Scatter plots: Train and Test predictions to validate how well the regression line fits.

Insight:

The scatter plots will provide a view on how well the linear model can fit the points for the train and test datasets.

Using the input [[28]], the model will predict the expenses for the given BMI 28.