Simple Linear Regression

Compulsory Task 1

Follow these steps:

- Import **insurance.csv** into your notebook (**Source**).
- Use the data in the relevant columns to determine how age affects insurance costs:
    - Plot a scatter plot with age on the x-axis and charges on the y-axis.
    - Using `linear_model.LinearRegression()` from sklearn, fit a model to your data, and make predictions on data.
    - Plot another scatter plot with the best-fit line.

Multiple Linear Regression

Compulsory Task 1

Follow these steps:

- Read **diabetes.csv** into a Jupyter notebook.
- The **diabetes.csv** aims to predict a person's progression in the condition with respect to various attributes about them.
- Differentiate between the independent variables and the dependent variable and assign them to variables x and y.

- Generate training and test sets comprising 80% and 20% of the data respectively.
- Use a MinMaxScaler and StandardScaler from sklearn.preprocessing. Fit these scalers on the **train set** and use these fit scalers to transform the **train** and **test sets**.
- Generate a multiple linear regression model using the **training set**. Use all of the independent variables.
- Print out the intercept and coefficients of the trained model.
- Generate predictions for the **test set**.
- Compute the r2_score of your model on the **test set**. You can get the r2_score from sklearn.metrics.
- Ensure your notebook is well commented with topics and comments on what your code is accomplishing.