

## **Instructions for Homework 2**

### **(Simple Linear Regression, Multiple Regression, Polynomial Regression)**

#### **PART A) Instructions for Simple Linear Regression**

- 1) Import the Libraries.
- 2) Import the Dataset.
- 3) Split the Dataset into Training and Testing.
- 4) Train the Simple Linear Regression model on the Training set result.
- 5) Predicting the Test set result.
- 6) Visualization of the Training set result.
- 7) Visualization of the Test set result.

#### **PART B) Instructions for Multiple Regression**

- 1) Import the Libraries.
- 2) Import the Dataset.
- 3) Encode the categorical data.
- 4) Split the dataset into the Training set and Test set.
- 5) Train the Multiple Linear Regression model on the Training set.
- 6) Predict the Test set results.

#### **PART C) Instructions for Polynomial Regression**

- 1) Import the Libraries.
- 2) Import the Dataset.
- 3) Train the Linear Regression model on the whole dataset.
- 4) Train the Polynomial Regression model on the whole dataset.
- 5) Visualize the Linear Regression results.
- 6) Visualize the Polynomial Regression results.
- 7) Further visualize the Polynomial Regression results (for higher resolution and smoother curve).
- 8) Predict a new result with Linear Regression.
- 9) Predict a new result with Polynomial Regression.