[ML’ 23] Simple Linear Regression Assignment

- In this assignment, you will use simple linear regression to predict the weekly sales of a supermarket given some information such as the store number, the fuel price, CPI(consumer price index) or others.
- Find the best variable (X) that can be used to predict the weekly sales (Y).
- Try all the variables for “X” and calculate the mean squared error for each trial.
- Create a new feature from the Date column.
- **Your code must show all five trials.**
- Cheating Detection will be applied and it will not be tolerated.
- Assignment Deadline: Friday **10/3/2023 11:59 PM**
- **You are expected to deliver the assignment using this google form according to the following instructions**:
  1- Upload a single “YourStudentID.py” code file containing the code for the five models and prints the MSE for each model.
  2- Upload a PDF file (report) containing:
  - Your name, id, department and UMS Level
  - A table that summarizes the mean square error of each model
  - Your conclusion the best variable to use for this task.

Take Note that the code file name must be YourStudentID.py (example:20191700123.py) or you will be penalized.
Take Note that the report file name must be YourStudentID.pdf (example: 20191700123.pdf) or you will be penalized.