COM 424 E: NEURAL NETWORKS
Homework

Use **Multilayer Perceptron** library in sklearn to develop the following model.

Car Classification Problem

The link to the dataset is https://archive.ics.uci.edu/ml/datasets/Car+Evaluation

- Download the data folder and use any text reader such as notepad to open the file. Ensure that you convert the data to .csv datatype.
- Read the description of the data to understand the role of each of the attributes.
- Implement a **multilayer perceptron** for Car Classification Problem in Python.
- You are given a multivariate classification data set, which contains various description for the car
- Here are some features that you must include as you implement the overall steps of building a model.
    - Train a multilayer perceptron using the r**ectified linear unit** function
    - Chose a stochastic gradient descent solver

      solver*{'lbfgs', 'sgd', 'adam'}, default='adam'*
    - Use an adaptive learning rate

      learning_rate*{'constant', 'invscaling', 'adaptive'}, default='constant'*
    - ***Use* shuffle*bool, default=True to shuffle data in each iterations***
- Use the **`score`**(X, y[, sample_weight]) function to get the score of the model
- Calculate the confusion matrix for the data points in your test set using the discrimination rule you will develop using the trained multilayer perceptron.