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**Subject: Project 8**

**Class: DSCI 512**

**Section: 01W**

**Instructor: Dr. Nengbing Tao**

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1. Load the dataset CreditCards.csv into memory.
2. Preprocess the inputs
   1. Standardize the inputs using the scale() function.
   2. Convert the standardized inputs to a data frame using the as.data.frame() function.
   3. Split the data into a training set containing 3/4 of the original data (test set containing the remaining 1/4 of the original data).
3. Build a neural networks model
   1. The response is quality and the inputs are: volatile.acidity, density, pH, and alcohol. Please use 1 hidden layer with 1 neuron.
   2. Plot the neural networks.
   3. Forecast the wine quality in the test dataset.
   4. Get the observed wine quality of the test dataset.
   5. Compute test error (MSE).