DTSC680: Applied Machine Learning
Module 3
Assignment 5

Directions

Complete the Assignment_5.ipynb file; further directions are located in that file.

Below is a simple rubric indicating how you will be graded:

Write Plotting Function 20%
Were you able to successfully write the plotTransformedData function? Do the figures it generates closely resemble the target figure?

Plot Initial Data 10%
Were you able to successfully plot the initial data? Does your figure closely resemble the target figure?

Define Data Matrix and Transformation Matrices 10%
Did you correctly declare and initialize the data matrix and thirteen transformation matrices as NumPy arrays?

Perform Linear Transformations and Plot Results 30%
Were you able to correctly perform the matrix multiplications (i.e. linear transformations)? Were you able to perform this computation in one line of code? Were you able to successfully plot using the plotTransformedData function?

Connect the Dots 30%
Were you able to correctly label all of the linear transformations?