Name: _____ Section: _____

Course code: **DS312**

Professor: **Jocelyn B. Barbosa, PhD**

Course Description: **Data Mining and Applications**

k-Nearest Neighbors (kNN) Algorithm

Objectives:

- To apply kNN algorithm to a fisheriris dataset.
- To identify similarity distance of the two (2) data points in a given dataset by applying distance function.
- To perform data analysis on fisheriris dataset.

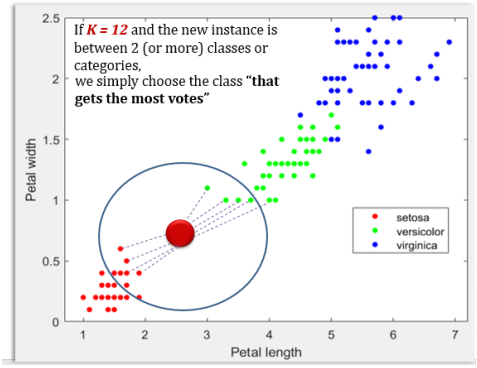
Directions:

1. Open fisheriris dataset (see attached **fisheriris.xlsx**) or you may download the csv it here: https://gist.githubusercontent.com/curran/a08a1080b88344b0c8a7/raw/0e7a9b0a5d22642a06d3d5b9bcbad9890c8ee534/iris.csv

2. Determine the k-Nearest Neighbors by the finding the similarity distance (using Euclidian distance) of the two (2) data points (i.e. from the given new instance to each of the elements/data points in the whole dataset).

   Note: *Check attached file for the value of* ***k*** *and* ***new instance*** *assigned to you.*

   Sample final output:



Deadline: <Check your USTeP account>.

Filename: <surname_firstname_kNN>.pdf

Example: **barbosa_jocelyn_kNN.pdf.**

Solutions:

Final output: