INFT 5603 Principals of Data Science, Fall 2023 Graduate College, Information Technology, Arkansas Tech University Assignment 13 / Due date: Wednesday, November 29, 2023 before midnight. Total points: 100. Good luck!

- 1. (30 points) Explain support vector machine (SVM) classification algorithm in a few sentences.
- 2. (70 points) Implement the support vector machine (SVM) method to the Iris data set in Python. Use the polynomial kernel function for SVM. Also, show the confusion matrix and normalized confusion matrix.

 Note: You can see SVM pre-defined function and it's all parameters from the following official Scikit Learn library link: https://scikit-learn.org/stable/modules/generated/sklearn.svm.SVC.html