INFT 5603 Principals of Data Science, Fall 2023 Graduate College, Information Technology, Arkansas Tech University Assignment 11/Due date: Sunday, November 12, 2023 before midnight. Total points: 100. Good luck!

1. (.	O points) Generate a random data set with the equation $y = 5 + 3.x$ and implement the linear regression	on for
tl	s data set in Python.	

- **2.** (35 points) Implement the k-nearest neighbor (kNN) algorithm to the Iris data set in Python and set k = 4.
- **3.** (35 points) Apply Gaussian Naïve Bayes classifier for the Iris data set in Python. Use 70% of the data set for training and 30% for testing. Also, find the number of mislabeled points.