**CS 459 Introduction to Machine Learning**

**Assignment**

**Part # 1**

Due: 8th April, 2022

In this assignment, you have to apply the machine learning to a problem and data sets of your choice. Part 1 of the assignment is as follows:

1. Choose an area, and discuss a problem of interest in that area. You need not choose a difficult problem, but try to choose one that is relevant and may be useful, whose results are going to be meaningful. You may go for problems for which data may be available in the department (e.g. Student data, network data). Discuss your problem with me on Friday 1st April after class.
2. Select relevant features for the problem. Mention their datatypes. Make sure the number of records in your data set is sufficiently large.
3. Write programs in python to load the dataset and perform various operations listed in the book (Chapter 1, page 13) “Introduction to Machine Learning with Python” by Muller and Guido. You should understand basic operations in NumPy, SciPy, Matplotlib, Pandas.

**Submission:**

**Softcopy**

1. A one paragraph description of the problem as an MS-Word document.
2. Dataset
3. Python program to load and view the dataset, using the commands listed in the book