11 January 2024 14:30-16:30

<u>Lab 1</u>

Instructions:

- 1. Implement the codes in python.
- 2. Submit a **zip file** for problem 1 and problem 2 that contains following files:
 - a. Short description (1/2 paragraphs) about your approach/algorithm/logic in a word/text file
 - b. python code file
 - c. outputs (in the same file used in (a) above)
- 3. Naming convention for zip file: <roll_no>_<name of student>_Lab1_11Jan24
- 4. Submit the zip file on following link: https://forms.gle/ui5C71MveW4YcPAJA

[Problem 1 - Classification]

Write a program for classification of english characters from notMNIST dataset.

Dataset:

- 1. **notMNIST** (Ref: https://www.kaggle.com/datasets/lubaroli/notmnist?resource=download)
- The dataset can be downloaded from the following link: https://drive.google.com/drive/folders/1V10pmedG2rGfhWdcvcQLVs2qwCn4sWpj?usp=sharing

[Problem 2 - Logistic Regression]

Write a program to predict if a candy is chocolate or not based on its other features using logistic regression.

Dataset:

1. The Ultimate Halloween Candy Power Ranking

 $(Ref: \underline{https://www.kaggle.com/datasets/fivethirtyeight/the-ultimate-halloween-candy-power-ranking})\\$

 The dataset can be downloaded from the following link: https://drive.google.com/drive/folders/15smGw-Y3O4yFKnNZow9lcdX2psbZNe5q?usp=sharing