# **Assignment 1**

### **Dataset Overview:**

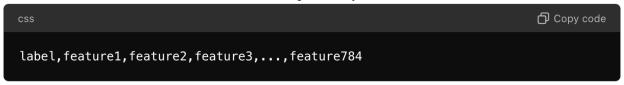
The dataset is provided in two files: train.csv and test.csv, representing the pre-partitioned training and testing sets, respectively.

- **train.csv:** Contains 60,000 instances.
- **test.csv:** Contains 10,000 instances.

Each line in the files corresponds to a single labeled data instance.

#### **Data Instance Format:**

For each line in the files, there are 785 elements separated by comma.



- Label: The first element represents the label, with possible values ranging from 0 to 9.
- **Features:** The remaining 784 elements are the features of the data instance, all represented as integers.

## Task To Be Done:

You are required to develop a Multilayer Perceptron (MLP) model using the training set and evaluate its performance on the testing set. Your evaluation should include performance metrics and any other relevant analysis (such as hyperparameter).

## **Deliverables:**

- 1. **Report:** A written report detailing your approach, model development, and evaluation results. A template for the report is provided.
- 2. **GitHub Repository:** Create a public GitHub repository and upload your code. Include the link to your repository in the report.