Problem Statement: (Academic Project)

A classic problem in the field of pattern recognition is that of **handwritten digit recognition**. Suppose that you have an image of a digit submitted by a user via a scanner, a tablet, or other digital devices. The goal is to develop a model that can correctly identify the digit (between 0-9) written in an image.

Objective

You are required to develop a model using Support Vector Machine which should correctly classify the **handwritten digits** based on the **pixel values given as features**.

Downloads:

For this problem, we use the **MNIST data** which is a large database of handwritten digits where we have pixel values of each digit along with its label.

Note:

It would take a lot of time for modeling on the full MNIST data, So you can sample the data and build the model which would make the computation faster.

Data Understanding:

Data in the csv is self-explanatory. Once opened and if we look through the data it is very easy to interpret and we can start our work.