A Practical activity Report submitted

for **Handwritten Text Recognition**

by

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Aims: The process of giving machines the ability to recognize human handwritten digits is known as handwritten digit recognition. Handwritten numbers are imperfect, varied from person to person, and can be constructed with a wide range of styles, making it difficult for the computer to complete the task. Through this activity, students will learn how to identify handwritten digits present in the input images using Machine Learning/Deep Learning.

Objectives: In the ELC activity entitled ‘Handwritten Digits Recognition’, students will explore and build machine learning models to identify different handwritten digits/text present in the input images.

The tasks involved are:

- Downloading of train.csv and test.csv file
- Extracting features from the handwritten digit images
- Creating learning models to accurately identify the handwritten digits from the given images.
- Evaluating the accuracy of built models using several performance measures (confusion matrix, accuracy, F1 score, etc.).