Task 3: OCR through Logistic Regression

Task Requirements:

You are required to implement logistic regression for Optical Character Recognition (OCR) using the dataset (previously used for the Naive Bayes Assignment). Your goal is to achieve a training accuracy of 90% using three different eta (learning rate) values: **0.1, 0.01,** and **0.001**.

Note:

In this assignment, we will implement logistic regression for Optical Character Recognition (OCR) tasks. We defined the input features as pixel values and the target variable as character labels from the OCR dataset. The logistic regression model was trained on the dataset using three different eta (learning rate) values: 0.1, 0.01, and 0.001. We set a stopping criterion to achieve a training accuracy of at least 90%, ensuring the model learns the data sufficiently. After training, we evaluated the model's performance on the training dataset and calculated the training accuracy for each eta value.