Assignment 12

1. Try to build a classifier for the MNIST dataset that achieves over 97% accuracy on the test set. [Hint: the KNeighborsClassifier works quite well for this task; you just need to find good hyperparameter values (try a grid search on the weights and n_neighbors hyperparameters).]
2. Suppose you want to classify pictures outdoor/indoor and daytime/night-time. Should you implement 2 Logistic Regression classifiers or one SoftMax Regression Classifier?
3. Implement Batch Gradient Descent with early stopping for SoftMax Regression(WITHOUT USING Scikit Learn)