MACHINE LEARNING ASSIGNMENT
DUE DATE: 16-11-2020

Instructions

- Plagiarism is strictly prohibited. In case of violation, a zero will be awarded for this assignment.
- You are free to use in-built libraries for this assignment.
- Submit a README.MD file for each question which provides the details about your software versions and how to run your code. Also include the details asked in the questions in it.

  The deadline for submission is 16-11, 2020, 2359 HRS.

Problem: Image classification using SIFT Features

Image classification using SIFT Feature matching: For this task you are provided with MNIST handwritten digits database. In SIFT, there is a threshold which controls the number of SIFT key points. You have to perform classification on this dataset using SIFT feature extraction and SVM (Support Vector Machine) Model for training and testing. Finally, you need to get two plots. a). Accuracy V/s Threshold and b). Time V/s Threshold.

You need to include the following in your README.md file:
1. Confusion matrix
2. Accuracy

You can use the existing SIFT code for this problem.