Project 6

Each group should
- Submit one lab report containing procedures and results to Canvas by June 14, midnight.
- Include a thoughtful and reflective paragraph from each team member summarizing what has been learned.
- Attach your well-documented code in the appendix of the report.
- You can use any programming language to do the project. MATLAB is preferred.

K-Nearest Neighbor Classifier for Handwritten Digits Classification

In this project, you will perform the handwritten digit classification of 0 and 1 first, then digit classification of 0 and 2, by using k-nearest neighbor classifier. Experiment with k values of 1, 3, 5 and 11.

You will also experiment with different features, first using the best two features selected from Project 1, then using all raw pixel values (28x28). Again, training sets are used for training and the test sets for test. Report the performance on the test data in terms of error rate and run time for both the Euclidean distance measure and the city-block distance measure.