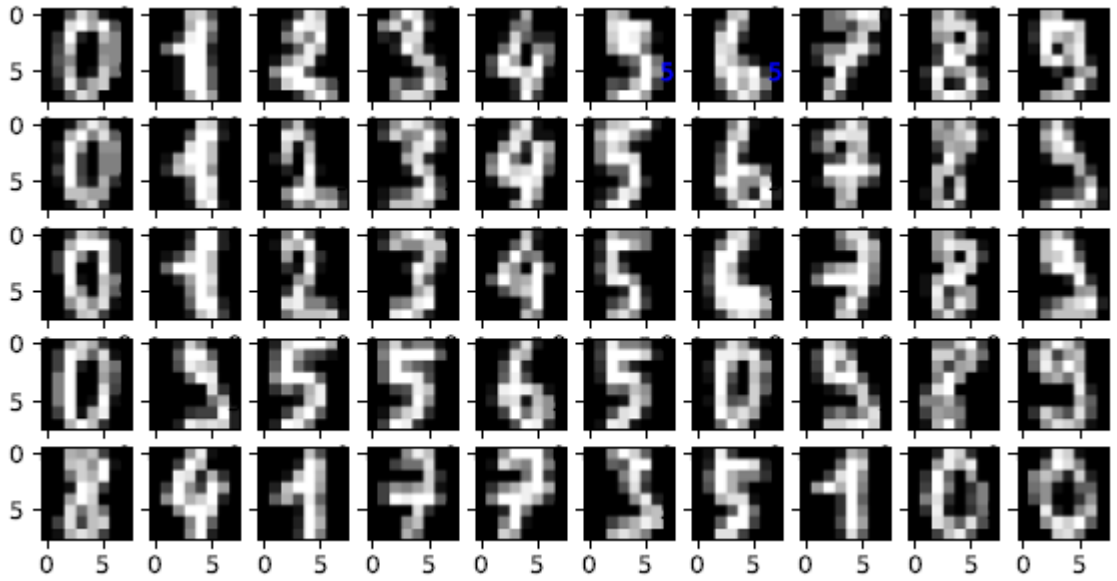
Mechatronics Engineering and Automation Program
CSE480: Machine Vision
Lab Assignment #06

Task 1:

Using Scikit Learn,

1. Load **digits** dataset.
2. Show the first 50 images, as follows.



Hint: to show an image we can use matplotlib.axes.Axes.imshow(). Assuming ax is the created axes object, then the first image, for example, could be shown using the values of images key of the returned Bunch object or even using its data key, which is flattened image to create feature vectors for classification: ax.imshow(bunch.data[0].reshape(8,8)) where bunch is the returned Bunch object

3. Implement the train-test splitting with a test size of 0.25 (set the random_state=42), properly perform standardization and transformation of datasets, train with k = 3 on training set, and report the accuracy on the test set