Assignments due on 17/02/2020

Assignment 1

1. In this assignment, we run train and test the classification of MNIST fashion data with LeNet.
2. Use python notebook as assignment. Put text and model picture before each block of code.
3. Train the LeNet by following the process mentioned in 6.6 in the “Dive into Deep Learning” book. Keep the train and test data for further use. Use MxNet
4. Report the accuracy and F1-score on the test set

Assignment 2

1. Import Pytorch.
2. Build your own CNN architecture with atleast three convolution layers, two max-pool layers, and three fully-connected (FC) layers.
3. Use ReLU as activation functions after conv layer.
4. Use sigmoid in the fully connected layers.
5. You can add batch normalization layer after each conv and fully conncected layers as we learned in the class.
6. Train your model on
7. Report the accuracy (accuracy and F1 score) while testing on the
8. Change learning rate, batch size, number of layers, activation functions to make the accuracy and F1-score better than the LeNet.