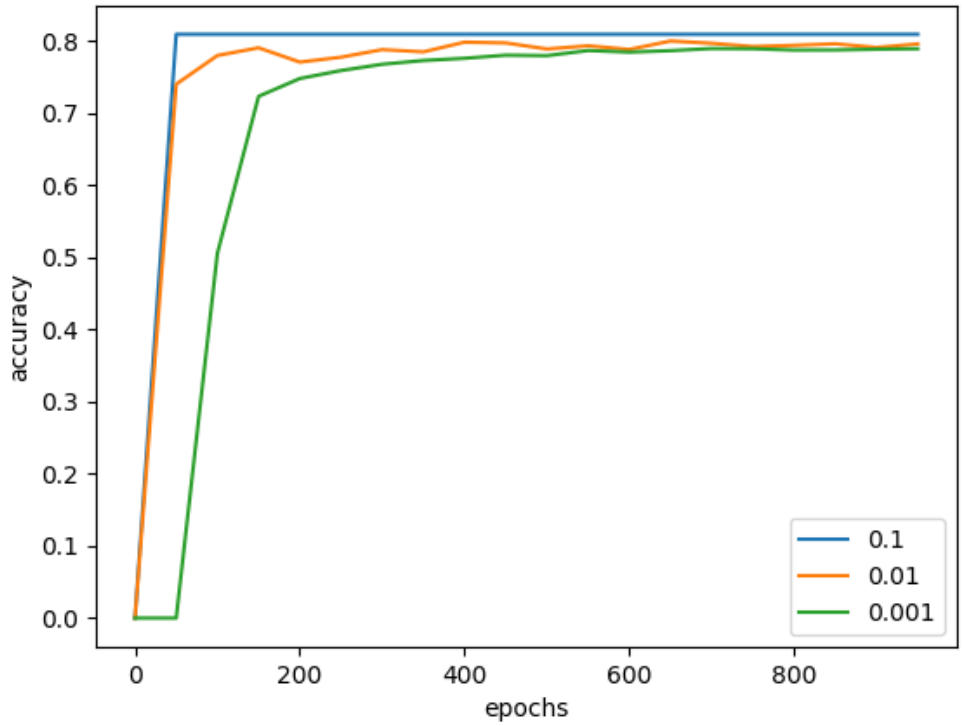
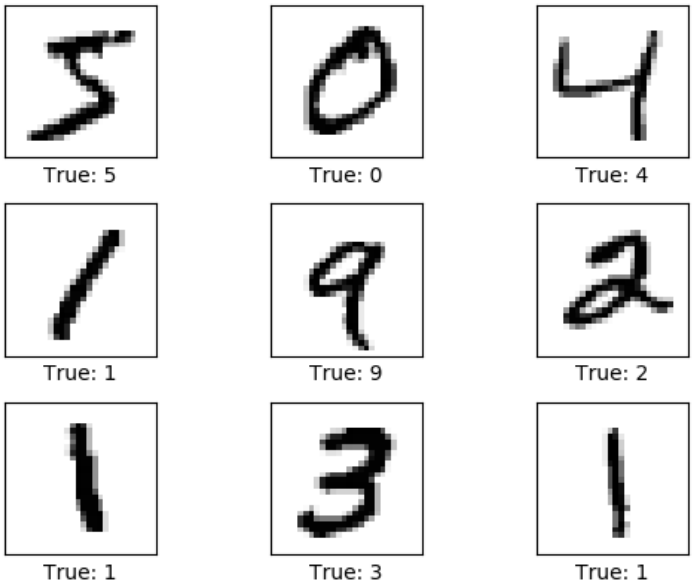
Exercise 3 Report

The exercise required the use of transposed convolutional neural network layers to regenerate the image of MNIST dataset, using tensorflow. Different learning rates were used to generate results. Following graph was obtained from the training dataset

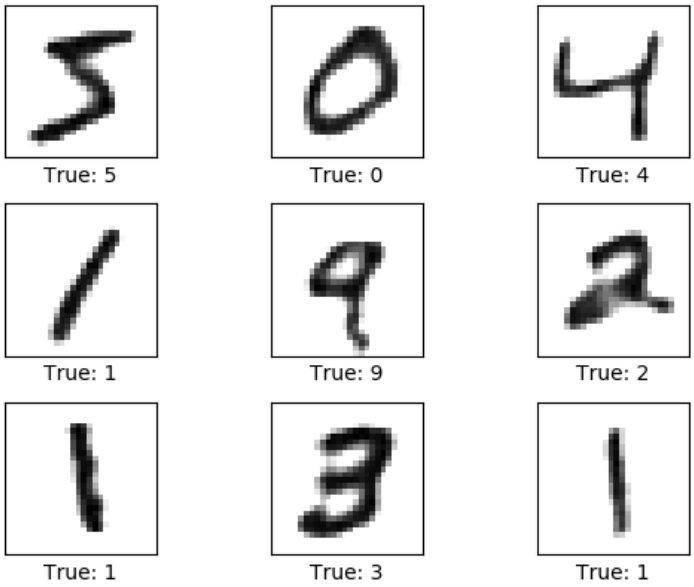


It can be seen from the result that close to 80% accuracy was achieved and then it became constant.

I sliced the mnist image data in to 9 images to see the actual output of the encoder. The original image, as well as generated image is displayed on the following page. The generated image is very close to original image, thus showing how powerful, encoders can be.



Original Image



Generated Image