In Lab6, we use the MNIST dataset to train a handwritten digit recognition model. During this training, we used twice convolutions and twice subsampling. In the first convolution, we use ten filter matrix, convert the origin matrix to ten matrix. And then we use subsampling convert to matrix. Repeat the above operation and convert the data to twenty matrix. Finally we use linear function to get ten dimensions data.

As a result we got the average loss as 0.0494 and up to 99% accuracy. All in all we trained a well model and achieved a relatively high accuracy rate.