

# Stats M231 Project 0

Biancheng Wang

1.

(b) Learning rate= $5e-2$ , epochs=20

(c)

Figure 1: training loss over epochs

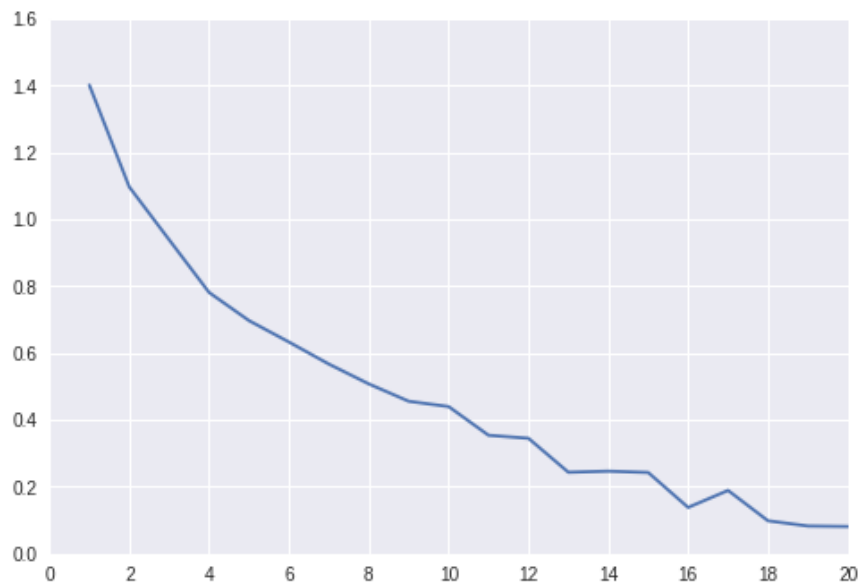
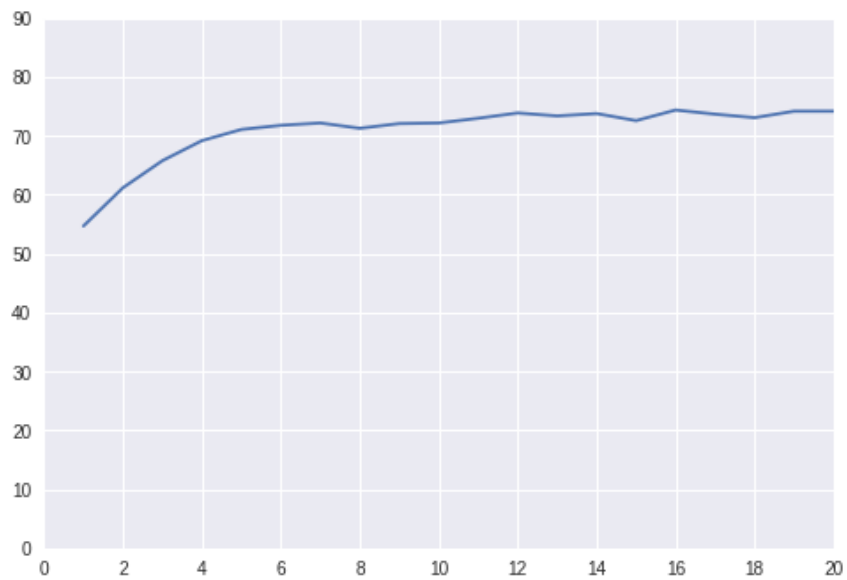


Figure 2: test accuracy over epochs



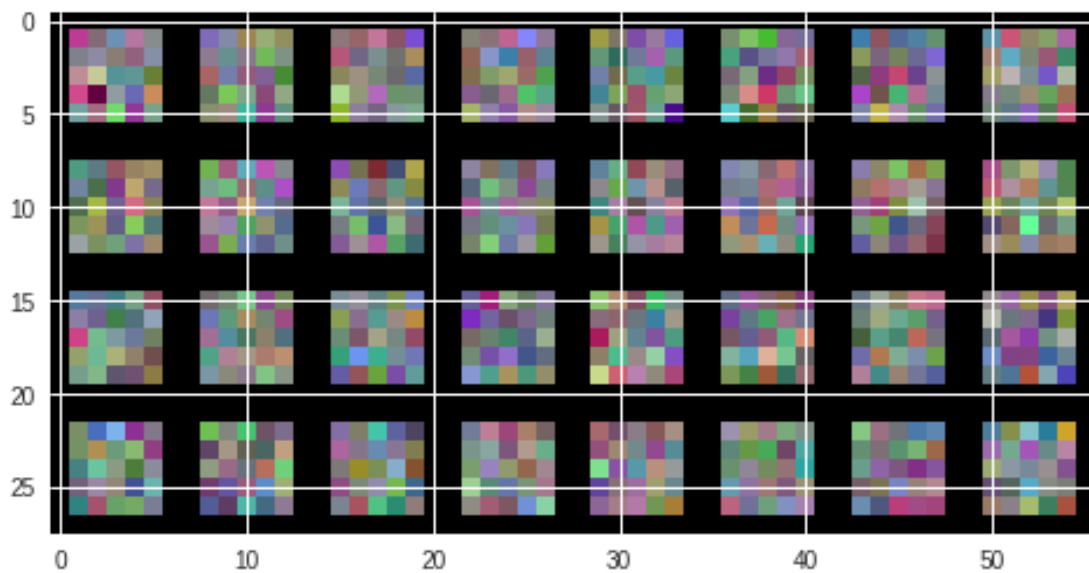
2.

(b) We can get higher accuracy with more Blocks in the ConvNet.

ConvNet Structure	Block1	Block1 and Block2	Block1, Block2 and Block3
Final Test Accuracies	22.40%	33.00%	60.00%

3.

(a) The learned 32 filters of the first convolutional layer in LeNet is plotted below.



(b)



The filter response maps for the given sample image of CIFAR-10 above is plotted below.

