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I have achieved accuracy of 96.04% and a loss 0.14435376 on the test data after training the model for 10 epochs.

No. of filters used in Convolution = 32

Size of filter = 3x3

Filter size used for Maxpooling = 2x2

Initial learning rate = 0.005

Classes defined:

Convolution class: `ConvClass_3x3`

Maxpool class: `MaxPooling_2x2`

Fully-connected layer class: `FC_layer`

FeedForward method used in each class: `forwardpass()`

Backpropagation method used in each class: `backwardpass()`

Convolution was performed by 3x3 filter without padding with filter size 32. So, input image dim(28,28) was transformed to dim(26,26,32). Maxpooling was done with 2x2 filter, so after maxpooling the output image dim(13,13,32). This output was fed to fully-connected layer, and the output from FC layer was put through ReLu and then through softmax function for the final output. Backpropagation was done to update weights in each layer accordingly in each pass. Total 10 epochs were used for training, and in each epoch 10k randomly shuffled examples were used.

Since I got good test accuracy (96.04%) with this architecture, I went ahead with it as the final submission, and I didn't changed the positioning of ReLu which might have been good fit inside the network (for e.g. after maxpool layer) rather than at the end, but since there was no specific mention of the architecture required for this assignment (and also confirmed the same from TA) I went ahead with the current one as final submission.