

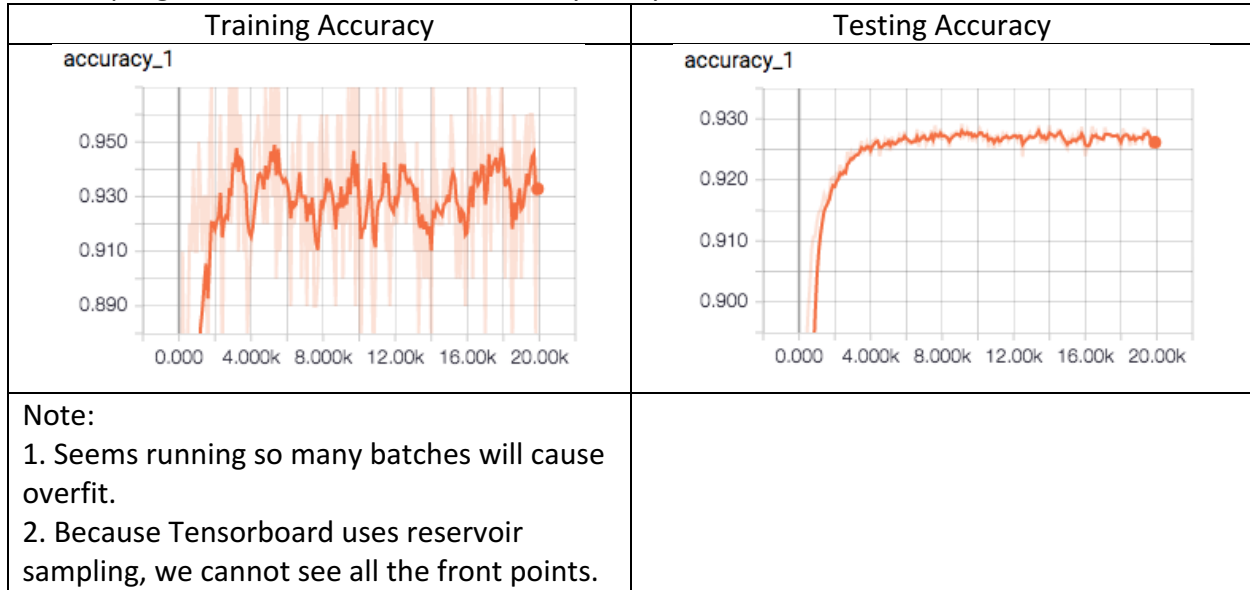
EE 526X Homework 2

Source Code: <https://github.com/zpcore/EE526X/tree/master/HW2>

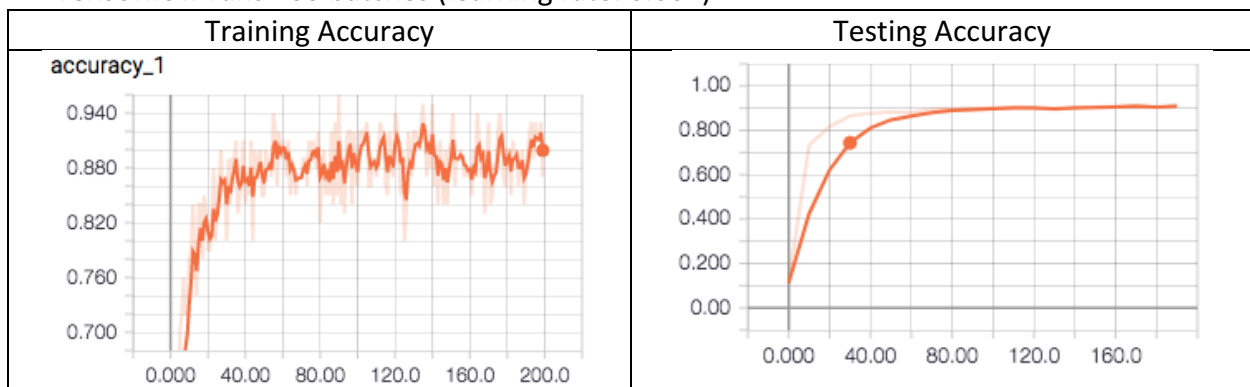
(Ipython doesn't work properly with tensorboard. Try the .py file.)

Question 1:

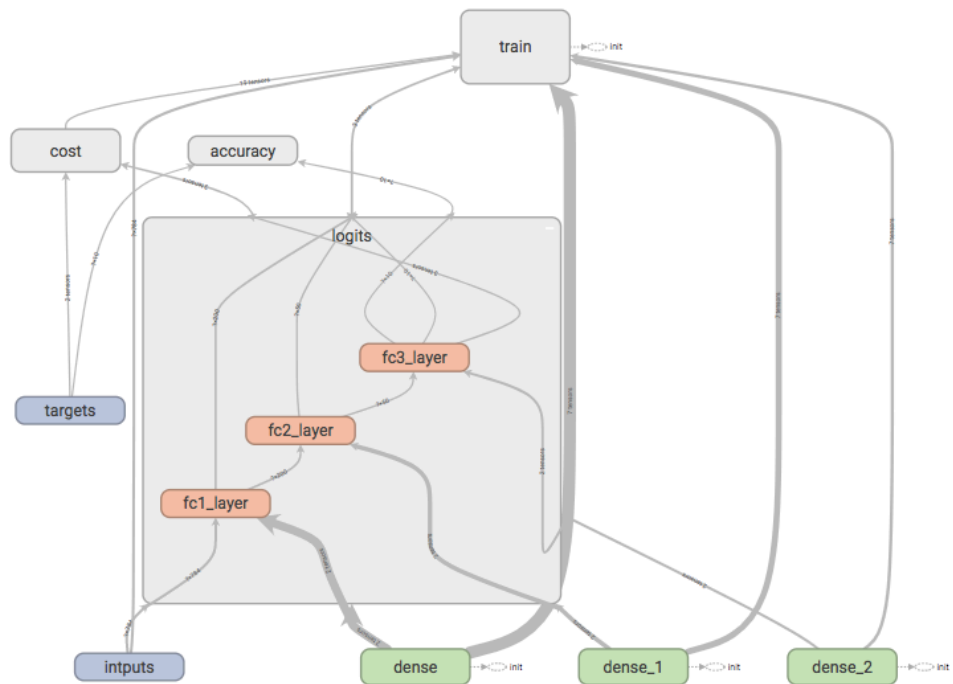
- Tensorflow runs 20000 batches (learning rate: 0.0001):
The program writes to the train accuracy every 100 batches:



- Tensorflow runs 200 batches (learning rate: 0.001)

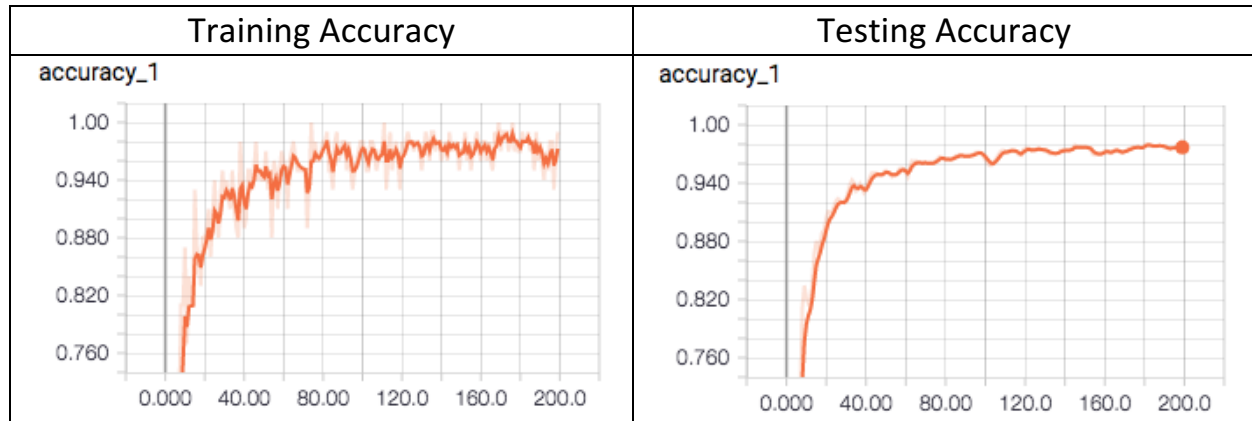


- The graph for the layer summary:

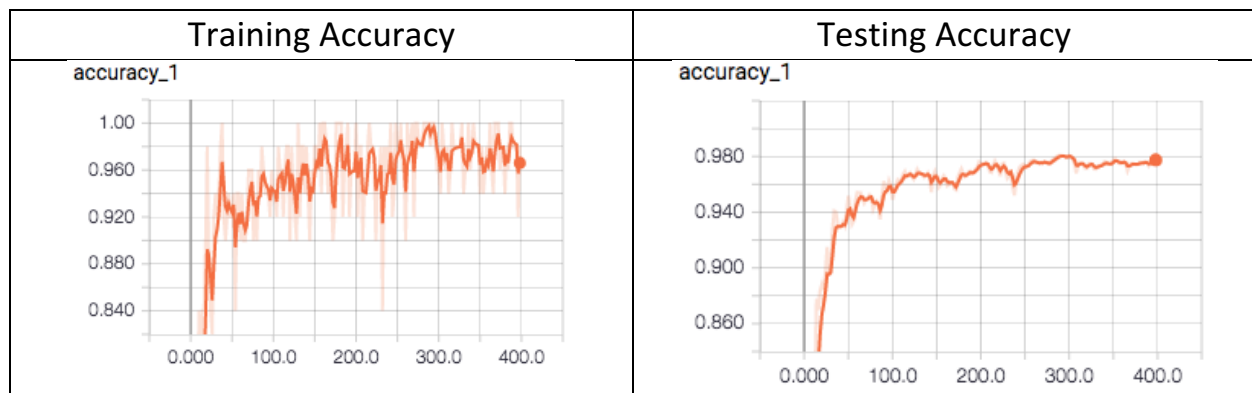


Question 2

- Tensorflow runs 200 batches (learning rate: 0.001):
(Use 20000 batches, each batch has size 100 takes too long to train. Here I use 200 batches, each batch has size 100. I draw one point for each batch.)



- Tensorflow runs 400 batches, each batch size 50(learning rate: 0.001):



When we use smaller batch size, the training and testing graph contains more oscillation.

- The graph for the layer summary:

