

Qiusi Shen

004749315

Question 1

Modify the script to print the accuracy the learned model on the training set.

So I changed the code from

```
print(sess.run(accuracy, feed_dict={x: mnist.test.images,  
                                   y_: mnist.test.labels}))
```

To

```
print(sess.run(accuracy, feed_dict={x: mnist.train.images,  
                                   y_: mnist.train.labels}))
```

The result of test is around 0.918

The result of train is around 0.917

After run the program many times, the result of train usually lower than the result of test.

Question 2

According to the spec, I changed loop time from 1000 to 10 then I get the accuracy is

0.7462

Then I changed the loop time to 10000

0.922

By observation, if the loop time only 10, it is too small to show the accurate result. So, 0.7462 is far away from correct result. And for loop 10000 times the result is near to the result loop 1000 times.

Question 3

According to the spec, I replace `tf.zeros` by `tf.ones`. The I run the program, the result I got is 0.918 which is like the result 0.917 I got before. So replace `tf.zeros` by `tf.ones` will not different much.

Because the 1000 loop time is large, changing the initial value will not affect the result. They will change the `W` and `b` values during the compile time.