```
###########################################
###RESULTS after running the model for ~ 20 epochs
###########################################
%run -i
"/Users/sharmisthamaitra/Documents/tensorflow/Image_classification_cnn_sharmisthamaitra.py"
length of features: 10000
First 5 labels: [6, 9, 9, 4, 1]
input data x: (?, 32, 32, 3)
input data after 30% dropout: (?, 32, 32, 3)
conv1 shape: (?, 32, 32, 32)
conv2 shape: (?, 16, 16, 64)
pool3 shape: (?, 8, 8, 64)
conv4 shape: (?, 3, 3, 128)
pool5 shape: (?, 2, 2, 128)
pool5_flat: Tensor("Reshape:0", shape=(?, 512), dtype=float32)
fullyconn1: Tensor("fc1/Relu:0", shape=(?, 128), dtype=float32)
fullyconn2: Tensor("fc2/Relu:0", shape=(?, 64), dtype=float32)
logits: Tensor("output/BiasAdd:0", shape=(?, 10), dtype=float32)
2018-06-27 23:47:36.801094: I tensorflow/core/platform/cpu_feature_guard.cc:140] Your CPU
supports instructions that this TensorFlow binary was not compiled to use: SSE4.1 SSE4.2 AVX AVX2
FMA

####### "Train accuracy" => percentage of correct predictions vs total number of predictions on
training data
####### "Test_accuracy" => percentage of correct predictions vs total number of predictions on test
data
0 Train accuracy: 0.273438 Test_accuracy: 0.2325
1 Train accuracy: 0.335938 Test_accuracy: 0.309
2 Train accuracy: 0.3125 Test_accuracy: 0.329
3 Train accuracy: 0.398438 Test_accuracy: 0.3985
4 Train accuracy: 0.414062 Test_accuracy: 0.407
5 Train accuracy: 0.421875 Test_accuracy: 0.4365
6 Train accuracy: 0.4375 Test_accuracy: 0.4585
7 Train accuracy: 0.460938 Test_accuracy: 0.4505
8 Train accuracy: 0.484375 Test_accuracy: 0.4825
9 Train accuracy: 0.484375 Test_accuracy: 0.504
10 Train accuracy: 0.53125 Test_accuracy: 0.4885
11 Train accuracy: 0.554688 Test_accuracy: 0.5195
12 Train accuracy: 0.5625 Test_accuracy: 0.533
13 Train accuracy: 0.601562 Test_accuracy: 0.5485
14 Train accuracy: 0.578125 Test_accuracy: 0.5345
15 Train accuracy: 0.65625 Test_accuracy: 0.584
16 Train accuracy: 0.640625 Test_accuracy: 0.5685
17 Train accuracy: 0.664062 Test_accuracy: 0.571
18 Train accuracy: 0.671875 Test_accuracy: 0.5825
```