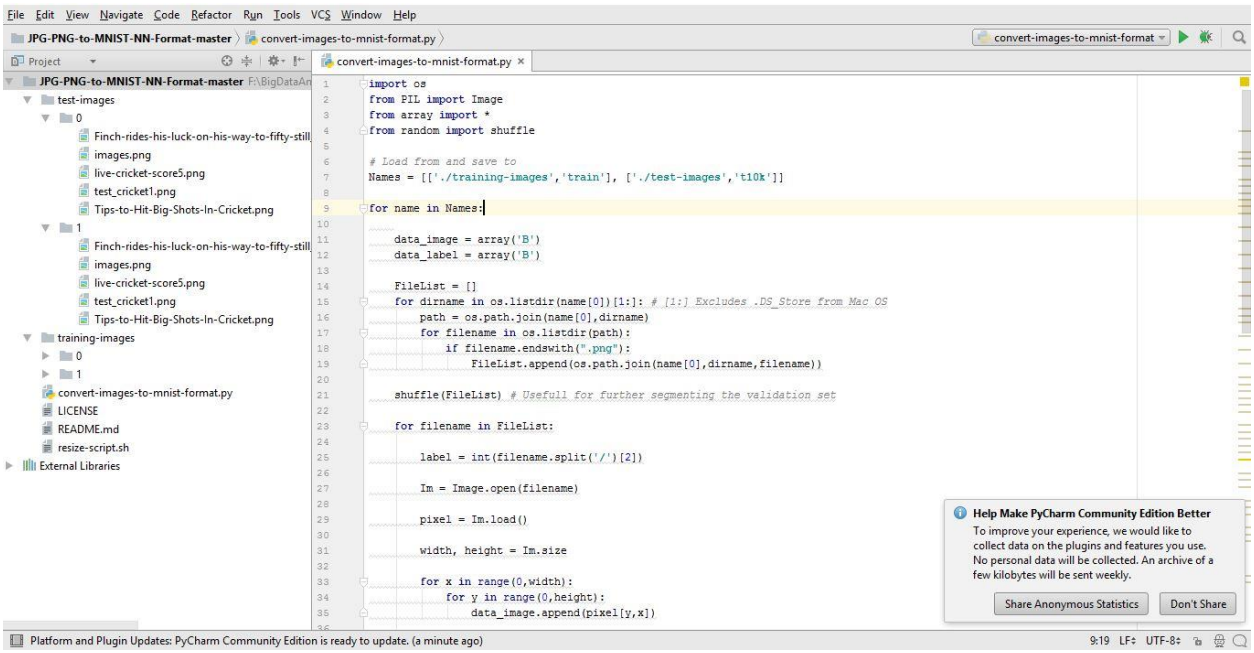
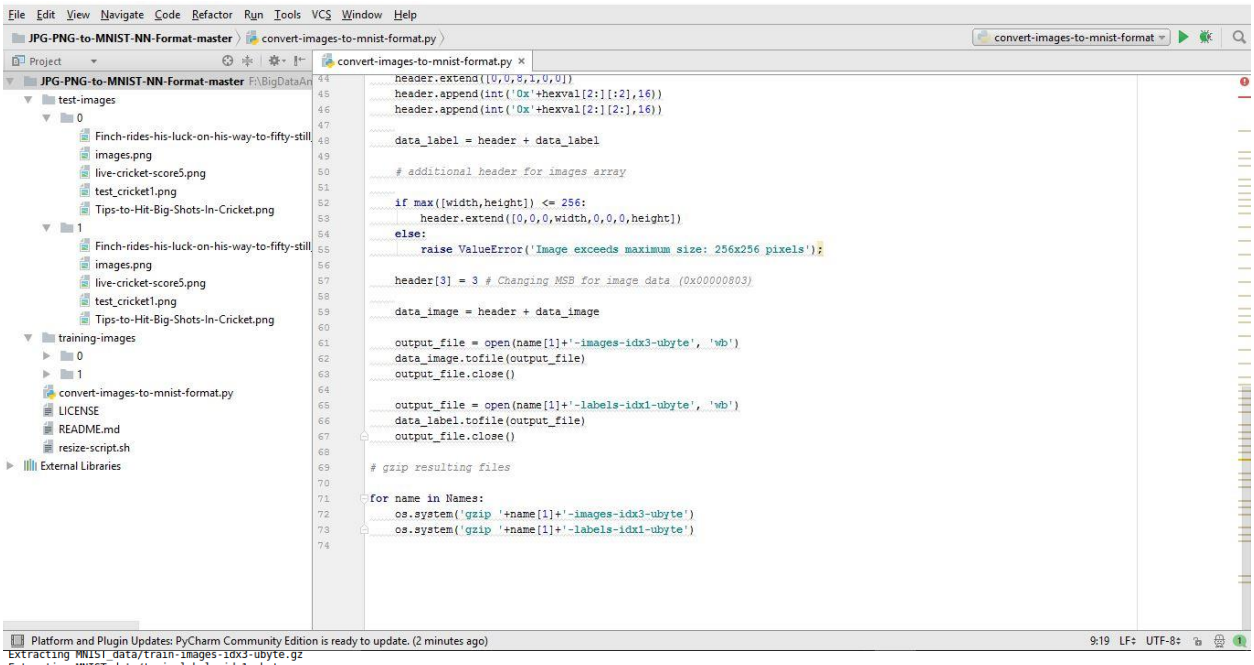
CS5542 Big Data Analytics and App
LAB ASSIGNMENT #9

CNN model using tensor Tensor Flow

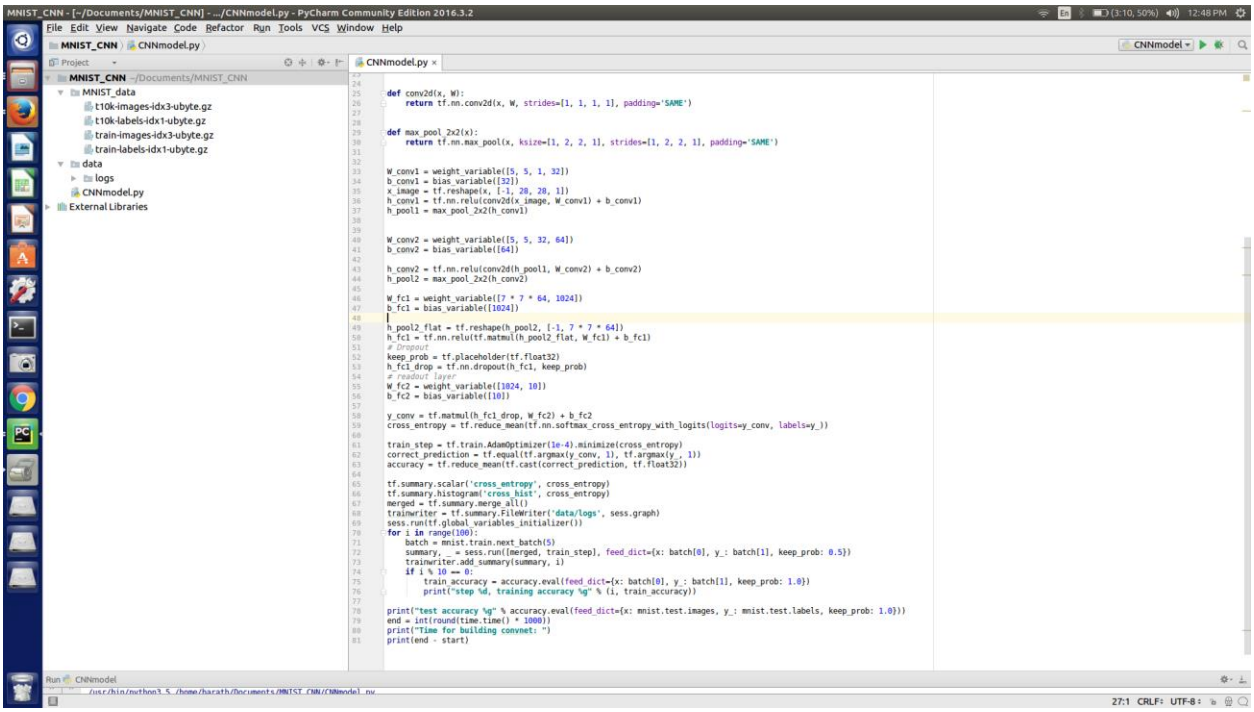
The CNN model for this lab is run on sport-cricket images. These images were collected from the internet and are resized into **28x28 pixel** size. Total of 15 images were collected for the data set, out of which 10 images were put into train images and 5 images were put into test images. These images were converted into .gz compressed format using a python program from https://github.com/gskielian/JPG-PNG-to-MNIST-NN-Format





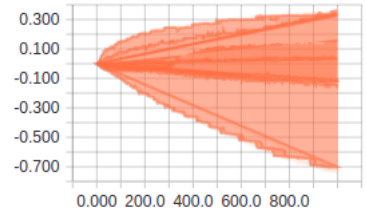

```
Extracting MNIST_data/train-images-idx3-ubyte.gz
Extracting MNIST_data/train-labels-idx1-ubyte.gz
Extracting MNIST_data/t10k-images-idx3-ubyte.gz
Extracting MNIST_data/t10k-labels-idx1-ubyte.gz
W tensorflow/core/platform/cpu_feature_guard.cc:45] The TensorFlow library wasn't compiled to use SSE3 instructions, but these are available on your machine and could speed up CPU computations.
W tensorflow/core/platform/cpu_feature_guard.cc:45] The TensorFlow library wasn't compiled to use SSE4.1 instructions, but these are available on your machine and could speed up CPU computations.
W tensorflow/core/platform/cpu_feature_guard.cc:45] The TensorFlow library wasn't compiled to use SSE4.2 instructions, but these are available on your machine and could speed up CPU computations.
W tensorflow/core/platform/cpu_feature_guard.cc:45] The TensorFlow library wasn't compiled to use AVX instructions, but these are available on your machine and could speed up CPU computations.
W tensorflow/core/platform/cpu_feature_guard.cc:45] The TensorFlow library wasn't compiled to use AVX2 instructions, but these are available on your machine and could speed up CPU computations.
W tensorflow/core/platform/cpu_feature_guard.cc:45] The TensorFlow library wasn't compiled to use FMA instructions, but these are available on your machine and could speed up CPU computations.
step 0, training accuracy 0.6
step 10, training accuracy 1
step 20, training accuracy 1
step 30, training accuracy 1
step 40, training accuracy 1
step 50, training accuracy 1
step 60, training accuracy 1
step 70, training accuracy 1
step 80, training accuracy 1
step 90, training accuracy 1
test accuracy 1
Time for building convnet:
5383

Process finished with exit code 0
```



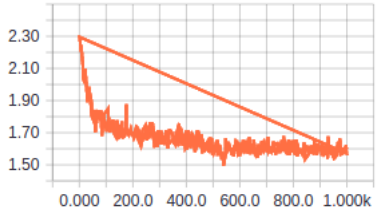
bias 1

bias
.

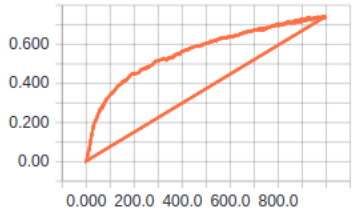


cross_hist 1

cross_hist
.

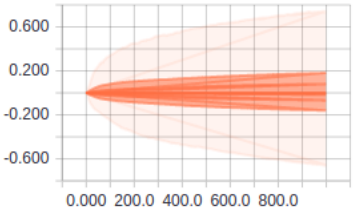


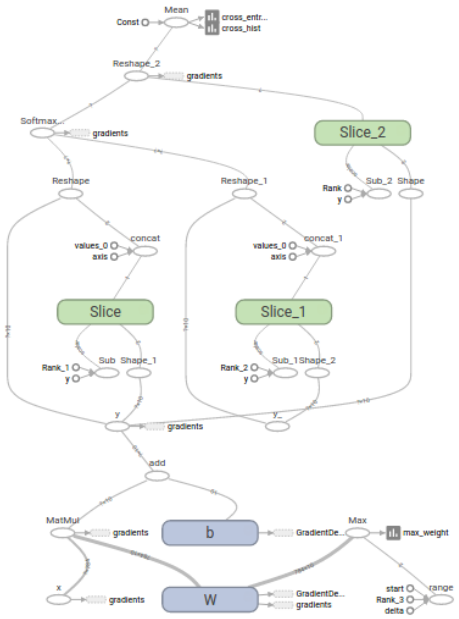
max_weight
.



weights 1

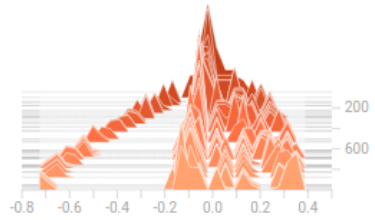
weights
.





bias

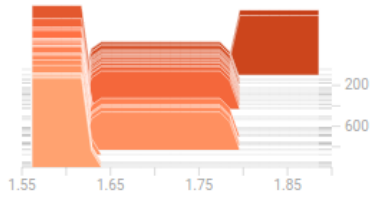
.

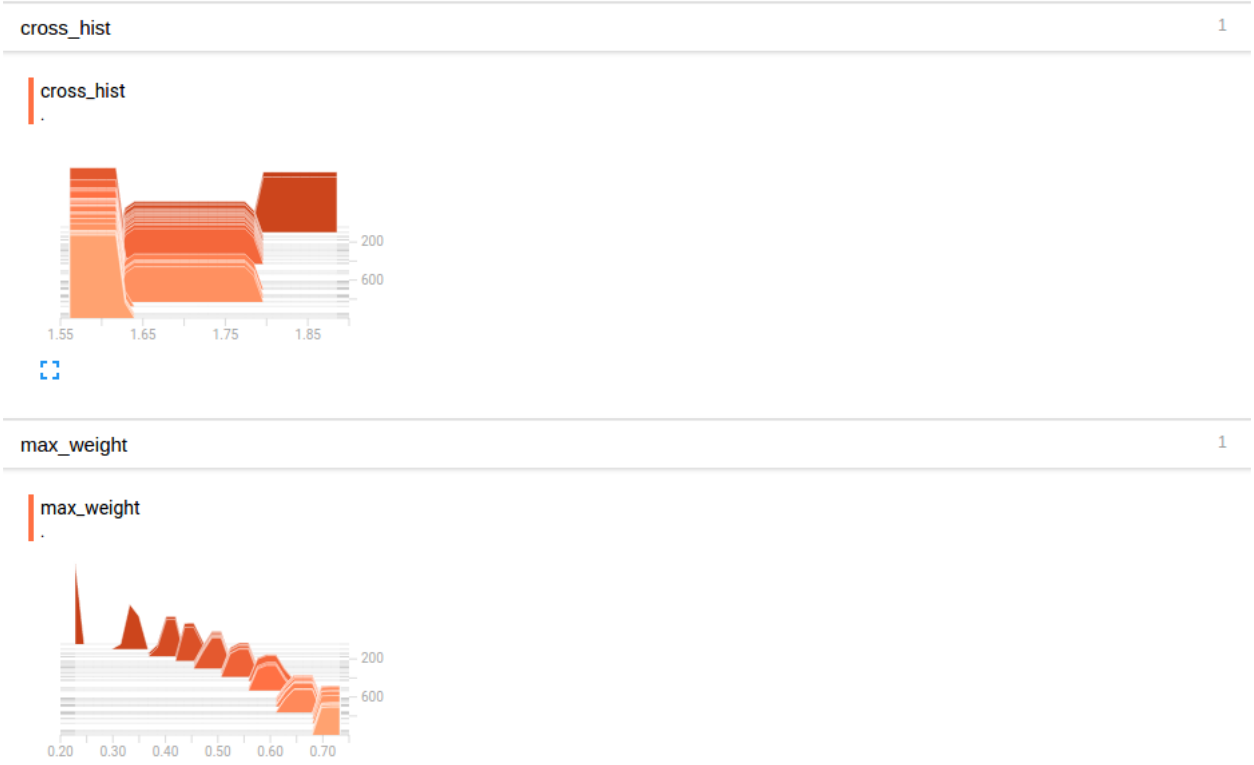


cross_hist

cross_hist

.





The accuracy came out as 100% because only 15 images were taken in total and as Tensor flow CNN model already generated high accuracy, the accuracy came out to be 100%.