Report

1st Run

* Batch Size=128
* Number of Epoch= 1
* Total Samples= 60,000
* Num\_classes = 10
* No of Convolution Layer:3
* 1st Filter size:32
* 2cd Filter size:64
* 3rd Filter size:32
* Kernel size =3\*3

(env\_ds) C:\Users\hp\Desktop\Deep Learning>python CNNProject1.py

Using TensorFlow backend.

x\_train shape: (60000, 28, 28, 1)

60000 train samples

10000 test samples

Train on 60000 samples, validate on 10000 samples

Epoch 1/1

2018-11-01 21:15:01.716328: I tensorflow/core/platform/cpu\_feature\_guard.cc:141] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX AVX2

60000/60000 [==============================] - 201s 3ms/step - loss: 0.3183 - acc: 0.8988 - val\_loss: 0.0621 - val\_acc: 0.9805

Test loss: 0.06209201390227536

Test accuracy: 0.9805

2cd Run

* Batch Size=128
* Number of Epoch= 2
* Total Samples= 60,000
* Num\_classes = 10
* No of Convolution Layer:3
* 1st Filter size:32
* 2cd Filter size:64
* 3rd Filter size:32
* Kernel size =3\*3

(env\_ds) C:\Users\hp\Desktop\Deep Learning>python CNNProject1.py

Using TensorFlow backend.

x\_train shape: (60000, 28, 28, 1)

60000 train samples

10000 test samples

Train on 60000 samples, validate on 10000 samples

Epoch 1/2

2018-11-01 21:20:33.780376: I tensorflow/core/platform/cpu\_feature\_guard.cc:141] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX AVX2

60000/60000 [==============================] - 226s 4ms/step - loss: 0.3099 - acc: 0.9006 - val\_loss: 0.0582 - val\_acc: 0.9796

Epoch 2/2

60000/60000 [==============================] - 249s 4ms/step - loss: 0.1088 - acc: 0.9674 - val\_loss: 0.0371 - val\_acc: 0.9874

Test loss: 0.03714167169486755

Test accuracy: 0.9874