```
C:\Python35\python.exe M:/ce888/ce888-assignment2/n_conv_autoencoder_mnist.py
Using TensorFlow backend.
Train on 60000 samples, validate on 10000 samples
Epoch 1/20
2018-04-15 12:05:50.324861: W C:\tf_jenkins\home\workspace\rel-win\M\windows\PY\35\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.
2018-04-15 12:05:50.325119: W C:\tf_jenkins\home\workspace\rel-win\M\windows\PY\35\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.
60000/60000 [==============================] - 66s - loss: 0.2285 - val_loss: 0.1704
Epoch 2/20
60000/60000 [==============================] - 65s - loss: 0.1585 - val_loss: 0.1524
Epoch 3/20
60000/60000 [==============================] - 65s - loss: 0.1442 - val_loss: 0.1355
Epoch 4/20
60000/60000 [==============================] - 66s - loss: 0.1358 - val_loss: 0.1318
Epoch 5/20
60000/60000 [==============================] - 65s - loss: 0.1307 - val_loss: 0.1265
Epoch 6/20
60000/60000 [==============================] - 65s - loss: 0.1270 - val_loss: 0.1281
Epoch 7/20
60000/60000 [==============================] - 65s - loss: 0.1243 - val_loss: 0.1233
Epoch 8/20
60000/60000 [==============================] - 65s - loss: 0.1220 - val_loss: 0.1200
Epoch 9/20
60000/60000 [==============================] - 65s - loss: 0.1199 - val_loss: 0.1205
Epoch 10/20
60000/60000 [==============================] - 65s - loss: 0.1178 - val_loss: 0.1170
Epoch 11/20
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27 60000/60000 [==============================] - 65s - loss
   : 0.1160 - val_loss: 0.1141
28 Epoch 12/20
29 60000/60000 [==============================] - 65s - loss
   : 0.1148 - val_loss: 0.1110
30 Epoch 13/20
31 60000/60000 [==============================] - 65s - loss
   : 0.1136 - val_loss: 0.1097
32 Epoch 14/20
33 60000/60000 [==============================] - 65s - loss
   : 0.1122 - val_loss: 0.1100
34 Epoch 15/20
35 60000/60000 [==============================] - 65s - loss
   : 0.1113 - val_loss: 0.1106
36 Epoch 16/20
37 60000/60000 [==============================] - 65s - loss
   : 0.1107 - val_loss: 0.1092
38 Epoch 17/20
39 60000/60000 [==============================] - 65s - loss
   : 0.1097 - val_loss: 0.1079
40 Epoch 18/20
41 60000/60000 [==============================] - 65s - loss
   : 0.1088 - val_loss: 0.1086
42 Epoch 19/20
43 60000/60000 [==============================] - 65s - loss
   : 0.1083 - val_loss: 0.1079
44 Epoch 20/20
45 60000/60000 [==============================] - 65s - loss
   : 0.1081 - val_loss: 0.1058
46 ================================================================
   ====
47 Epochs is : 20
48 ================================================================
   ====
49 The loss on x_test : 0.105755232394
50 The accuracy on x_test : 0.894244767606
51 ================================================================
   ====
52 The loss on x_train : 0.106837361872
53 The accuracy on x_train : 0.893162638128
54 ================================================================
   ====
55 The loss on x1_train : 0.106975696592
56 The accuracy on x1_train : 0.893024303408
57 ================================================================
```

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57 ====
58 The loss on x2_train : 0.106949692897
59 The accuracy on x2_train : 0.893050307103
60 ================================================================
   =====
61 The loss on x3_train : 0.106973888361
62 The accuracy on x3_train : 0.893026111639
63
64 Process finished with exit code 0
65
```