```
1 C:\Python35\python.exe M:/ce888/ce888-assignment2/n+
  1 conv auto-encoder mnist.py
2 Using TensorFlow backend.
3 Train on 60000 samples, validate on 10000 samples
4 Epoch 1/21
5 2018-04-15 16:38:24.214617: 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.
6 2018-04-15 16:38:24.214888: 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.
7 60000/60000 [============ ] - 67s - loss
  : 0.2250 - val loss: 0.1754
8 Epoch 2/21
9 60000/60000 [=========== ] - 69s - loss
  : 0.1614 - val loss: 0.1511
10 Epoch 3/21
11 60000/60000 [============= ] - 66s - loss
  : 0.1481 - val loss: 0.1431
12 Epoch 4/21
13 60000/60000 [============= ] - 67s - loss
  : 0.1404 - val loss: 0.1365
14 Epoch 5/21
15 60000/60000 [============== ] - 66s - loss
  : 0.1355 - val loss: 0.1294
16 Epoch 6/21
17 60000/60000 [============ ] - 67s - loss
  : 0.1313 - val loss: 0.1292
18 Epoch 7/21
19 60000/60000 [=========== ] - 67s - loss
  : 0.1276 - val loss: 0.1245
20 Epoch 8/21
21 60000/60000 [============= ] - 69s - loss
  : 0.1249 - val loss: 0.1226
22 Epoch 9/21
23 60000/60000 [============= ] - 69s - loss
  : 0.1229 - val loss: 0.1202
24 Epoch 10/21
25 60000/60000 [============= ] - 67s - loss
  : 0.1208 - val loss: 0.1191
26 Epoch 11/21
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27 60000/60000 [============ ] - 67s - loss
  : 0.1193 - val loss: 0.1179
28 Epoch 12/21
29 60000/60000 [============] - 67s - loss
  : 0.1182 - val loss: 0.1162
30 Epoch 13/21
31 60000/60000 [============= ] - 67s - loss
  : 0.1173 - val loss: 0.1139
32 Epoch 14/21
33 60000/60000 [============ ] - 67s - loss
  : 0.1158 - val loss: 0.1143
34 Epoch 15/21
35 60000/60000 [=============] - 68s - loss
  : 0.1143 - val loss: 0.1156
36 Epoch 16/21
37 60000/60000 [============ ] - 68s - loss
  : 0.1136 - val loss: 0.1129
38 Epoch 17/21
39 60000/60000 [============ ] - 66s - loss
  : 0.1128 - val loss: 0.1111
40 Epoch 18/21
41 60000/60000 [============ ] - 70s - loss
  : 0.1122 - val loss: 0.1099
42 Epoch 19/21
43 60000/60000 [============== ] - 66s - loss
  : 0.1116 - val loss: 0.1082
44 Epoch 20/21
45 60000/60000 [============= ] - 67s - loss
  : 0.1103 - val loss: 0.1091
46 Epoch 21/21
47 60000/60000 [============= ] - 67s - loss
  : 0.1098 - val loss: 0.1076
49 Epochs is : 21
51 The loss on x test : 0.107585167801
52 The accuracy on x test : 0.892414832199
54 The loss on x train: 0.108563315964
55 The accuracy on x train : 0.891436684036
```

```
57 The loss on x1 train : 0.108684790683
58 The accuracy on x1 train : 0.891315209317
60 The loss on x2 train : 0.108660111276
61 The accuracy on x2 train: 0.891339888724
=====
63 The loss on x3 train : 0.108697142609
64 The accuracy on x3 train : 0.891302857391
65 Exception ignored in: <bound method BaseSession. del
  of <tensorflow.python.client.session.Session object at
  0x000001C18034E7B8>>
66 Traceback (most recent call last):
67 File "C:\Python35\lib\site-packages\tensorflow\python\
  client\session.py", line 701, in del
68 TypeError: 'NoneType' object is not callable
69
70 Process finished with exit code 0
71
```