```
1 C:\Python35\python.exe M:/ce888/ce888-assignment2/
  n denoising autoencoder mnist.py
2 Using TensorFlow backend.
3 Train on 60000 samples, validate on 10000 samples
4 Epoch 1/20
5 2018-04-15 13:14:20.640726: 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 13:14:20.640974: 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 [============= ] - 136s - loss
  : 0.1471 - val loss: 0.0988
8 Epoch 2/20
9 60000/60000 [========== ] - 133s - loss
  : 0.0885 - val loss: 0.0833
10 Epoch 3/20
11 60000/60000 [============ ] - 133s - loss
  : 0.0814 - val loss: 0.0794
12 Epoch 4/20
13 60000/60000 [============ ] - 134s - loss
  : 0.0783 - val loss: 0.0757
14 Epoch 5/20
15 60000/60000 [============= ] - 133s - loss
  : 0.0765 - val loss: 0.0746
16 Epoch 6/20
17 60000/60000 [============= ] - 135s - loss
  : 0.0751 - val loss: 0.0734
18 Epoch 7/20
19 60000/60000 [=========== ] - 141s - loss
  : 0.0740 - val loss: 0.0722
20 Epoch 8/20
21 60000/60000 [============ ] - 136s - loss
  : 0.0732 - val loss: 0.0726
22 Epoch 9/20
23 60000/60000 [============ ] - 135s - loss
  : 0.0725 - val loss: 0.0718
24 Epoch 10/20
25 60000/60000 [============ ] - 138s - loss
  : 0.0720 - val loss: 0.0722
26 Epoch 11/20
```

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27 60000/60000 [============ ] - 142s - loss
  : 0.0715 - val loss: 0.0707
28 Epoch 12/20
29 60000/60000 [============ ] - 142s - loss
  : 0.0711 - val loss: 0.0705
30 Epoch 13/20
31 60000/60000 [============= ] - 142s - loss
  : 0.0708 - val loss: 0.0707
32 Epoch 14/20
33 60000/60000 [============= ] - 143s - loss
  : 0.0705 - val loss: 0.0699
34 Epoch 15/20
35 60000/60000 [============= ] - 140s - loss
  : 0.0701 - val loss: 0.0701
36 Epoch 16/20
37 60000/60000 [============= ] - 140s - loss
  : 0.0699 - val loss: 0.0686
38 Epoch 17/20
39 60000/60000 [=========== ] - 142s - loss
  : 0.0696 - val loss: 0.0694
40 Epoch 18/20
41 60000/60000 [============ ] - 141s - loss
  : 0.0694 - val loss: 0.0684
42 Epoch 19/20
: 0.0692 - val loss: 0.0694
44 Epoch 20/20
45 60000/60000 [============== ] - 145s - loss
  : 0.0690 - val loss: 0.0685
47 Epochs is : 20
49 The loss on x test : 0.068547017920
50 The accuracy on x test : 0.931452982080
====
52 The loss on x train : 0.069056754675
53 The accuracy on x_{train}: 0.930943245325
====
55 The loss on x1 train: 0.069123309523
56 The accuracy on x1 train: 0.930876690477
```

## File - unknown

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57 ====
58 The loss on x2 train : 0.069100178303
59 The accuracy on x2 train: 0.930899821697
=====
61 The loss on x3_train : 0.069122009331
62 The accuracy on x3_train : 0.930877990669
63 Exception ignored in: <bound method BaseSession. del
  of <tensorflow.python.client.session.Session object at
  0x0000027380356D30>>
64 Traceback (most recent call last):
    File "C:\Python35\lib\site-packages\tensorflow\python\
  client\session.py", line 701, in del
66 TypeError: 'NoneType' object is not callable
67
68 Process finished with exit code 0
69
```