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1 /Users/snehamishra/PycharmProjects/Test/venv/bin/python /
  Users/snehamishra/Desktop/UMKC/Fall2018/Python/Python-
  DeepLearning_Fall2018/Mod2_Lab1/Source/DeepLearning_Lesson2
  /mod2_Lab1_2.3.py
2 Using TensorFlow backend.
3 /Users/snehamishra/Desktop/UMKC/Fall2018/Python/Python-
  DeepLearning_Fall2018/Mod2_Lab1/Source/DeepLearning_Lesson2
  /mod2_Lab1_2.3.py:26: UserWarning: Update your `Dense` call
    to the Keras 2 API: `Dense(input_shape=(784,), activation
    ="softmax", units=10, kernel_initializer="normal")`"
4   model.add(Dense(output_dim=10, input_shape=(784,), init='
    normal', activation='softmax'))
5 _____
6 Layer (type)           Output Shape
  Param #
7 =====
8 dense_1 (Dense)        (None, 10)          7850
9 =====
10 Total params: 7,850
11 Trainable params: 7,850
12 Non-trainable params: 0
13 _____
14 /Users/snehamishra/Desktop/UMKC/Fall2018/Python/Python-
  DeepLearning_Fall2018/Mod2_Lab1/Source/DeepLearning_Lesson2
  /mod2_Lab1_2.3.py:32: UserWarning: The `nb_epoch` argument
  in `fit` has been renamed `epochs`.
15   model.fit(X_train, Y_Train, nb_epoch=nb_epoch, batch_size
  =batch_size, callbacks=[tensorboard])
16 2018-11-07 16:26:35.991052: I tensorflow/core/platform/
  cpu_feature_guard.cc:141] Your CPU supports instructions
  that this TensorFlow binary was not compiled to use: AVX2
  FMA
17 Epoch 1/20
18
19   50/60000 [.....] - ETA: 1:31 -
  loss: 2.4512 - acc: 0.0400
20  2600/60000 [>.....] - ETA: 2s -
  loss: 2.1768 - acc: 0.2250
21  5300/60000 [=>.....] - ETA: 1s -
  loss: 1.9684 - acc: 0.4021
22  8500/60000 [==>.....] - ETA: 1s -
  loss: 1.7703 - acc: 0.5180
23  11900/60000 [==>.....] - ETA: 1s -
  loss: 1.6195 - acc: 0.5834
24  14800/60000 [=====>.....] - ETA: 1s -

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24 loss: 1.5175 - acc: 0.6234
25 17950/60000 [=====>.....] - ETA: 0s -
    loss: 1.4276 - acc: 0.6528
26 21150/60000 [=====>.....] - ETA: 0s -
    loss: 1.3498 - acc: 0.6757
27 24350/60000 [=====>.....] - ETA: 0s -
    loss: 1.2864 - acc: 0.6939
28 27450/60000 [=====>.....] - ETA: 0s -
    loss: 1.2308 - acc: 0.7100
29 29500/60000 [=====>.....] - ETA: 0s -
    loss: 1.1989 - acc: 0.7184
30 32100/60000 [=====>.....] - ETA: 0s -
    loss: 1.1625 - acc: 0.7281
31 34600/60000 [=====>.....] - ETA: 0s -
    loss: 1.1309 - acc: 0.7357
32 37400/60000 [=====>.....] - ETA: 0s -
    loss: 1.0996 - acc: 0.7430
33 40350/60000 [=====>.....] - ETA: 0s -
    loss: 1.0710 - acc: 0.7493
34 42900/60000 [=====>.....] - ETA: 0s -
    loss: 1.0458 - acc: 0.7556
35 45700/60000 [=====>.....] - ETA: 0s -
    loss: 1.0211 - acc: 0.7618
36 48850/60000 [=====>.....] - ETA: 0s -
    loss: 0.9955 - acc: 0.7679
37 52100/60000 [=====>.....] - ETA: 0s -
    loss: 0.9710 - acc: 0.7735
38 55000/60000 [=====>...] - ETA: 0s -
    loss: 0.9530 - acc: 0.7772
39 57400/60000 [=====>...] - ETA: 0s -
    loss: 0.9392 - acc: 0.7803
40 60000/60000 [=====] - 1s 19us/step
    - loss: 0.9240 - acc: 0.7833
41 Epoch 2/20
42
43 50/60000 [.....] - ETA: 3s -
    loss: 0.4783 - acc: 0.9400
44 3400/60000 [>.....] - ETA: 0s -
    loss: 0.5793 - acc: 0.8582
45 6750/60000 [==>.....] - ETA: 0s -
    loss: 0.5751 - acc: 0.8585
46 9700/60000 [==>.....] - ETA: 0s -
    loss: 0.5695 - acc: 0.8625
47 12350/60000 [==>.....] - ETA: 0s -
    loss: 0.5620 - acc: 0.8649
48 15000/60000 [==>.....] - ETA: 0s -
    loss: 0.5563 - acc: 0.8663
49 17650/60000 [==>.....] - ETA: 0s -
    loss: 0.5559 - acc: 0.8639
50 20550/60000 [==>.....] - ETA: 0s -
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50 loss: 0.5543 - acc: 0.8628
51 23350/60000 [=====>.....] - ETA: 0s -
    loss: 0.5513 - acc: 0.8633
52 25850/60000 [=====>.....] - ETA: 0s -
    loss: 0.5474 - acc: 0.8641
53 28650/60000 [=====>.....] - ETA: 0s -
    loss: 0.5432 - acc: 0.8655
54 31800/60000 [=====>.....] - ETA: 0s -
    loss: 0.5420 - acc: 0.8662
55 34700/60000 [=====>.....] - ETA: 0s -
    loss: 0.5375 - acc: 0.8669
56 37250/60000 [=====>.....] - ETA: 0s -
    loss: 0.5358 - acc: 0.8672
57 39850/60000 [=====>.....] - ETA: 0s -
    loss: 0.5340 - acc: 0.8674
58 42850/60000 [=====>.....] - ETA: 0s -
    loss: 0.5326 - acc: 0.8675
59 45950/60000 [=====>.....] - ETA: 0s -
    loss: 0.5310 - acc: 0.8674
60 49100/60000 [=====>.....] - ETA: 0s -
    loss: 0.5267 - acc: 0.8682
61 51950/60000 [=====>.....] - ETA: 0s -
    loss: 0.5241 - acc: 0.8689
62 54950/60000 [=====>....] - ETA: 0s -
    loss: 0.5211 - acc: 0.8695
63 58000/60000 [=====>..] - ETA: 0s -
    loss: 0.5187 - acc: 0.8698
64 60000/60000 [=====] - 1s 17us/step
    - loss: 0.5178 - acc: 0.8702
65 Epoch 3/20
66
67 50/60000 [.....] - ETA: 2s -
    loss: 0.5151 - acc: 0.8000
68 2350/60000 [>.....] - ETA: 1s -
    loss: 0.4595 - acc: 0.8838
69 4800/60000 [=>.....] - ETA: 1s -
    loss: 0.4684 - acc: 0.8815
70 7650/60000 [==>.....] - ETA: 1s -
    loss: 0.4656 - acc: 0.8822
71 10700/60000 [====>.....] - ETA: 0s -
    loss: 0.4674 - acc: 0.8803
72 13850/60000 [====>.....] - ETA: 0s -
    loss: 0.4658 - acc: 0.8817
73 16550/60000 [====>.....] - ETA: 0s -
    loss: 0.4663 - acc: 0.8810
74 19400/60000 [====>.....] - ETA: 0s -
    loss: 0.4650 - acc: 0.8812
75 22650/60000 [====>.....] - ETA: 0s -
    loss: 0.4636 - acc: 0.8814
76 25700/60000 [====>.....] - ETA: 0s -
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76 loss: 0.4598 - acc: 0.8825
77 28700/60000 [=====>.....] - ETA: 0s -
    loss: 0.4578 - acc: 0.8832
78 31300/60000 [=====>.....] - ETA: 0s -
    loss: 0.4557 - acc: 0.8835
79 34050/60000 [=====>.....] - ETA: 0s -
    loss: 0.4559 - acc: 0.8828
80 36950/60000 [=====>.....] - ETA: 0s -
    loss: 0.4550 - acc: 0.8823
81 39950/60000 [=====>.....] - ETA: 0s -
    loss: 0.4538 - acc: 0.8825
82 43000/60000 [=====>.....] - ETA: 0s -
    loss: 0.4514 - acc: 0.8831
83 45850/60000 [=====>.....] - ETA: 0s -
    loss: 0.4509 - acc: 0.8830
84 48650/60000 [=====>.....] - ETA: 0s -
    loss: 0.4497 - acc: 0.8831
85 51750/60000 [=====>.....] - ETA: 0s -
    loss: 0.4496 - acc: 0.8829
86 54800/60000 [=====>...] - ETA: 0s -
    loss: 0.4488 - acc: 0.8831
87 57550/60000 [=====>..] - ETA: 0s -
    loss: 0.4488 - acc: 0.8827
88 60000/60000 [=====] - 1s 18us/
    step - loss: 0.4476 - acc: 0.8828
89 Epoch 4/20
90
91      50/60000 [.....] - ETA: 2s -
    loss: 0.4815 - acc: 0.8600
92      3150/60000 [>.....] - ETA: 0s -
    loss: 0.3995 - acc: 0.9000
93      6300/60000 [==>.....] - ETA: 0s -
    loss: 0.4177 - acc: 0.8919
94      9450/60000 [==>.....] - ETA: 0s -
    loss: 0.4164 - acc: 0.8914
95      11700/60000 [==>.....] - ETA: 0s -
    loss: 0.4156 - acc: 0.8913
96      14500/60000 [==>.....] - ETA: 0s -
    loss: 0.4164 - acc: 0.8908
97      17650/60000 [==>.....] - ETA: 0s -
    loss: 0.4168 - acc: 0.8900
98      20900/60000 [==>.....] - ETA: 0s -
    loss: 0.4132 - acc: 0.8901
99      23750/60000 [==>.....] - ETA: 0s -
    loss: 0.4127 - acc: 0.8911
100     26700/60000 [==>.....] - ETA: 0s -
    loss: 0.4136 - acc: 0.8899
101     29900/60000 [==>.....] - ETA: 0s -
    loss: 0.4136 - acc: 0.8899
102     33100/60000 [==>.....] - ETA: 0s -
```

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102 loss: 0.4109 - acc: 0.8908
103 36300/60000 [=====>.....] - ETA: 0s -
    loss: 0.4115 - acc: 0.8905
104 38900/60000 [=====>.....] - ETA: 0s -
    loss: 0.4116 - acc: 0.8901
105 41500/60000 [=====>.....] - ETA: 0s -
    loss: 0.4120 - acc: 0.8900
106 44650/60000 [=====>.....] - ETA: 0s -
    loss: 0.4112 - acc: 0.8900
107 47150/60000 [=====>.....] - ETA: 0s -
    loss: 0.4116 - acc: 0.8897
108 49400/60000 [=====>.....] - ETA: 0s -
    loss: 0.4103 - acc: 0.8900
109 52000/60000 [=====>....] - ETA: 0s -
    loss: 0.4112 - acc: 0.8898
110 54900/60000 [=====>...] - ETA: 0s -
    loss: 0.4122 - acc: 0.8896
111 57150/60000 [=====>..] - ETA: 0s -
    loss: 0.4135 - acc: 0.8890
112 59350/60000 [=====>.] - ETA: 0s -
    loss: 0.4132 - acc: 0.8890
113 60000/60000 [=====] - 1s 18us/
    step - loss: 0.4133 - acc: 0.8890
114 Epoch 5/20
115
116    50/60000 [.....] - ETA: 4s -
    loss: 0.4188 - acc: 0.9000
117    2600/60000 [>.....] - ETA: 1s -
    loss: 0.4029 - acc: 0.8935
118    5300/60000 [=>.....] - ETA: 1s -
    loss: 0.3957 - acc: 0.8934
119    7900/60000 [==>.....] - ETA: 1s -
    loss: 0.3990 - acc: 0.8935
120    10850/60000 [====>.....] - ETA: 0s -
    loss: 0.3962 - acc: 0.8945
121    13100/60000 [====>.....] - ETA: 0s -
    loss: 0.3940 - acc: 0.8939
122    15100/60000 [====>.....] - ETA: 0s -
    loss: 0.3916 - acc: 0.8938
123    18050/60000 [=====>.....] - ETA: 0s -
    loss: 0.3949 - acc: 0.8929
124    20900/60000 [=====>.....] - ETA: 0s -
    loss: 0.3923 - acc: 0.8931
125    23700/60000 [=====>.....] - ETA: 0s -
    loss: 0.3922 - acc: 0.8931
126    26550/60000 [=====>.....] - ETA: 0s -
    loss: 0.3946 - acc: 0.8925
127    29700/60000 [=====>.....] - ETA: 0s -
    loss: 0.3946 - acc: 0.8930
128    32850/60000 [=====>.....] - ETA: 0s -
```

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128 loss: 0.3944 - acc: 0.8931
129 35850/60000 [=====>.....] - ETA: 0s -
    loss: 0.3938 - acc: 0.8927
130 38250/60000 [=====>.....] - ETA: 0s -
    loss: 0.3930 - acc: 0.8929
131 40950/60000 [=====>.....] - ETA: 0s -
    loss: 0.3938 - acc: 0.8926
132 44000/60000 [=====>.....] - ETA: 0s -
    loss: 0.3932 - acc: 0.8927
133 47350/60000 [=====>.....] - ETA: 0s -
    loss: 0.3927 - acc: 0.8931
134 50550/60000 [=====>.....] - ETA: 0s -
    loss: 0.3922 - acc: 0.8930
135 53000/60000 [=====>....] - ETA: 0s -
    loss: 0.3914 - acc: 0.8934
136 55400/60000 [=====>...] - ETA: 0s -
    loss: 0.3905 - acc: 0.8936
137 58250/60000 [=====>..] - ETA: 0s -
    loss: 0.3915 - acc: 0.8932
138 60000/60000 [=====] - 1s 18us/
    step - loss: 0.3917 - acc: 0.8934
139 Epoch 6/20
140
141 50/60000 [.....] - ETA: 2s -
    loss: 0.2187 - acc: 0.9400
142 3100/60000 [>.....] - ETA: 0s -
    loss: 0.3743 - acc: 0.9013
143 5850/60000 [=>.....] - ETA: 0s -
    loss: 0.3896 - acc: 0.8973
144 7850/60000 [==>.....] - ETA: 1s -
    loss: 0.3781 - acc: 0.8977
145 10500/60000 [==>.....] - ETA: 0s -
    loss: 0.3759 - acc: 0.8980
146 13450/60000 [==>.....] - ETA: 0s -
    loss: 0.3761 - acc: 0.8980
147 16300/60000 [=====>.....] - ETA: 0s -
    loss: 0.3728 - acc: 0.9004
148 18950/60000 [=====>.....] - ETA: 0s -
    loss: 0.3734 - acc: 0.8997
149 21100/60000 [=====>.....] - ETA: 0s -
    loss: 0.3760 - acc: 0.8990
150 24150/60000 [=====>.....] - ETA: 0s -
    loss: 0.3748 - acc: 0.8985
151 27200/60000 [=====>.....] - ETA: 0s -
    loss: 0.3769 - acc: 0.8975
152 30400/60000 [=====>.....] - ETA: 0s -
    loss: 0.3788 - acc: 0.8973
153 33100/60000 [=====>.....] - ETA: 0s -
    loss: 0.3795 - acc: 0.8963
154 35950/60000 [=====>.....] - ETA: 0s -
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154 loss: 0.3779 - acc: 0.8972
155 39050/60000 [=====>.....] - ETA: 0s -
    loss: 0.3774 - acc: 0.8974
156 42100/60000 [=====>.....] - ETA: 0s -
    loss: 0.3758 - acc: 0.8979
157 45050/60000 [=====>.....] - ETA: 0s -
    loss: 0.3757 - acc: 0.8975
158 47900/60000 [=====>.....] - ETA: 0s -
    loss: 0.3756 - acc: 0.8975
159 50700/60000 [=====>....] - ETA: 0s -
    loss: 0.3754 - acc: 0.8974
160 52500/60000 [=====>....] - ETA: 0s -
    loss: 0.3751 - acc: 0.8975
161 54950/60000 [=====>...] - ETA: 0s -
    loss: 0.3759 - acc: 0.8971
162 57500/60000 [=====>..] - ETA: 0s -
    loss: 0.3766 - acc: 0.8968
163 60000/60000 [=====] - 1s 18us/
step - loss: 0.3767 - acc: 0.8967
164 Epoch 7/20
165
166    50/60000 [.....] - ETA: 3s -
    loss: 0.2241 - acc: 0.9600
167    2450/60000 [>.....] - ETA: 1s -
    loss: 0.3730 - acc: 0.9037
168    5650/60000 [=>.....] - ETA: 1s -
    loss: 0.3670 - acc: 0.9021
169    8800/60000 [==>.....] - ETA: 0s -
    loss: 0.3630 - acc: 0.9033
170    11300/60000 [==>.....] - ETA: 0s -
    loss: 0.3631 - acc: 0.9039
171    13800/60000 [==>.....] - ETA: 0s -
    loss: 0.3615 - acc: 0.9039
172    16800/60000 [==>.....] - ETA: 0s -
    loss: 0.3577 - acc: 0.9037
173    19750/60000 [==>.....] - ETA: 0s -
    loss: 0.3558 - acc: 0.9040
174    22100/60000 [==>.....] - ETA: 0s -
    loss: 0.3561 - acc: 0.9041
175    24850/60000 [==>.....] - ETA: 0s -
    loss: 0.3575 - acc: 0.9033
176    28050/60000 [==>.....] - ETA: 0s -
    loss: 0.3594 - acc: 0.9024
177    31350/60000 [==>.....] - ETA: 0s -
    loss: 0.3587 - acc: 0.9023
178    34000/60000 [==>.....] - ETA: 0s -
    loss: 0.3609 - acc: 0.9013
179    36750/60000 [==>.....] - ETA: 0s -
    loss: 0.3616 - acc: 0.9009
180    39900/60000 [==>.....] - ETA: 0s -
```

```
180 loss: 0.3613 - acc: 0.9012
181 42750/60000 [=====>.....] - ETA: 0s -
    loss: 0.3627 - acc: 0.9007
182 45850/60000 [=====>.....] - ETA: 0s -
    loss: 0.3642 - acc: 0.9004
183 48250/60000 [=====>.....] - ETA: 0s -
    loss: 0.3640 - acc: 0.9003
184 50250/60000 [=====>.....] - ETA: 0s -
    loss: 0.3649 - acc: 0.9000
185 53200/60000 [=====>....] - ETA: 0s -
    loss: 0.3661 - acc: 0.8997
186 56450/60000 [=====>..] - ETA: 0s -
    loss: 0.3666 - acc: 0.8990
187 58650/60000 [=====>.] - ETA: 0s -
    loss: 0.3658 - acc: 0.8992
188 60000/60000 [=====] - 1s 18us/
    step - loss: 0.3653 - acc: 0.8994
189 Epoch 8/20
190
191 50/60000 [.....] - ETA: 2s -
    loss: 0.3214 - acc: 0.8600
192 3100/60000 [>.....] - ETA: 0s -
    loss: 0.3779 - acc: 0.8929
193 6250/60000 [==>.....] - ETA: 0s -
    loss: 0.3754 - acc: 0.8941
194 9000/60000 [==>.....] - ETA: 0s -
    loss: 0.3791 - acc: 0.8940
195 11600/60000 [==>.....] - ETA: 0s -
    loss: 0.3775 - acc: 0.8950
196 14400/60000 [==>.....] - ETA: 0s -
    loss: 0.3701 - acc: 0.8970
197 17550/60000 [==>.....] - ETA: 0s -
    loss: 0.3697 - acc: 0.8968
198 20500/60000 [==>.....] - ETA: 0s -
    loss: 0.3710 - acc: 0.8963
199 22050/60000 [==>.....] - ETA: 0s -
    loss: 0.3705 - acc: 0.8966
200 23750/60000 [==>.....] - ETA: 0s -
    loss: 0.3698 - acc: 0.8972
201 26350/60000 [==>.....] - ETA: 0s -
    loss: 0.3688 - acc: 0.8975
202 29150/60000 [==>.....] - ETA: 0s -
    loss: 0.3682 - acc: 0.8976
203 31700/60000 [=====>.....] - ETA: 0s -
    loss: 0.3679 - acc: 0.8972
204 33900/60000 [=====>.....] - ETA: 0s -
    loss: 0.3657 - acc: 0.8976
205 36450/60000 [=====>.....] - ETA: 0s -
    loss: 0.3624 - acc: 0.8986
206 39300/60000 [=====>.....] - ETA: 0s -
```

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206 loss: 0.3615 - acc: 0.8992
207 42400/60000 [=====>.....] - ETA: 0s -
loss: 0.3619 - acc: 0.8993
208 45050/60000 [=====>.....] - ETA: 0s -
loss: 0.3604 - acc: 0.9002
209 48000/60000 [=====>.....] - ETA: 0s -
loss: 0.3607 - acc: 0.9004
210 51150/60000 [=====>.....] - ETA: 0s -
loss: 0.3604 - acc: 0.9003
211 54300/60000 [=====>...] - ETA: 0s -
loss: 0.3584 - acc: 0.9010
212 57250/60000 [=====>...] - ETA: 0s -
loss: 0.3568 - acc: 0.9014
213 59550/60000 [=====>.] - ETA: 0s -
loss: 0.3561 - acc: 0.9017
214 60000/60000 [=====] - 1s 19us/
step - loss: 0.3563 - acc: 0.9016
215 Epoch 9/20
216
217 50/60000 [.....] - ETA: 3s -
loss: 0.4703 - acc: 0.8800
218 2850/60000 [>.....] - ETA: 1s -
loss: 0.3424 - acc: 0.9053
219 6000/60000 [==>.....] - ETA: 0s -
loss: 0.3308 - acc: 0.9097
220 9350/60000 [==>.....] - ETA: 0s -
loss: 0.3356 - acc: 0.9073
221 11900/60000 [====>.....] - ETA: 0s -
loss: 0.3377 - acc: 0.9062
222 14300/60000 [=====>.....] - ETA: 0s -
loss: 0.3406 - acc: 0.9061
223 17000/60000 [=====>.....] - ETA: 0s -
loss: 0.3399 - acc: 0.9056
224 20050/60000 [=====>.....] - ETA: 0s -
loss: 0.3417 - acc: 0.9054
225 23050/60000 [=====>.....] - ETA: 0s -
loss: 0.3447 - acc: 0.9041
226 25500/60000 [=====>.....] - ETA: 0s -
loss: 0.3454 - acc: 0.9040
227 28350/60000 [=====>.....] - ETA: 0s -
loss: 0.3444 - acc: 0.9048
228 31750/60000 [=====>.....] - ETA: 0s -
loss: 0.3452 - acc: 0.9049
229 35200/60000 [=====>.....] - ETA: 0s -
loss: 0.3474 - acc: 0.9040
230 38650/60000 [=====>.....] - ETA: 0s -
loss: 0.3501 - acc: 0.9032
231 41250/60000 [=====>.....] - ETA: 0s -
loss: 0.3491 - acc: 0.9034
232 44100/60000 [=====>.....] - ETA: 0s -
```

```
232 loss: 0.3515 - acc: 0.9026
233 47450/60000 [=====>.....] - ETA: 0s -
loss: 0.3507 - acc: 0.9031
234 50850/60000 [=====>.....] - ETA: 0s -
loss: 0.3509 - acc: 0.9029
235 54250/60000 [=====>...] - ETA: 0s -
loss: 0.3500 - acc: 0.9032
236 56700/60000 [=====>..] - ETA: 0s -
loss: 0.3501 - acc: 0.9033
237 59650/60000 [=====>.] - ETA: 0s -
loss: 0.3491 - acc: 0.9033
238 60000/60000 [=====] - 1s 17us/
step - loss: 0.3490 - acc: 0.9033
239 Epoch 10/20
240
241 50/60000 [.....] - ETA: 2s -
loss: 0.1479 - acc: 1.0000
242 3400/60000 [>.....] - ETA: 0s -
loss: 0.3643 - acc: 0.9000
243 6800/60000 [==>.....] - ETA: 0s -
loss: 0.3496 - acc: 0.9034
244 10050/60000 [====>.....] - ETA: 0s -
loss: 0.3515 - acc: 0.9017
245 12250/60000 [====>.....] - ETA: 0s -
loss: 0.3513 - acc: 0.9020
246 15050/60000 [====>.....] - ETA: 0s -
loss: 0.3500 - acc: 0.9021
247 18500/60000 [=====>.....] - ETA: 0s -
loss: 0.3478 - acc: 0.9030
248 21950/60000 [=====>.....] - ETA: 0s -
loss: 0.3462 - acc: 0.9039
249 25050/60000 [=====>.....] - ETA: 0s -
loss: 0.3462 - acc: 0.9047
250 28250/60000 [=====>.....] - ETA: 0s -
loss: 0.3459 - acc: 0.9042
251 31600/60000 [=====>.....] - ETA: 0s -
loss: 0.3471 - acc: 0.9038
252 34950/60000 [=====>.....] - ETA: 0s -
loss: 0.3471 - acc: 0.9039
253 37650/60000 [=====>.....] - ETA: 0s -
loss: 0.3464 - acc: 0.9040
254 40650/60000 [=====>.....] - ETA: 0s -
loss: 0.3444 - acc: 0.9046
255 44000/60000 [=====>.....] - ETA: 0s -
loss: 0.3436 - acc: 0.9049
256 47400/60000 [=====>.....] - ETA: 0s -
loss: 0.3431 - acc: 0.9049
257 49800/60000 [=====>.....] - ETA: 0s -
loss: 0.3439 - acc: 0.9044
258 52800/60000 [=====>....] - ETA: 0s -
```

```
258 loss: 0.3436 - acc: 0.9044
259 56350/60000 [=====>...] - ETA: 0s -
    loss: 0.3442 - acc: 0.9045
260 59850/60000 [=====>.] - ETA: 0s -
    loss: 0.3428 - acc: 0.9047
261 60000/60000 [=====] - 1s 16us/
    step - loss: 0.3428 - acc: 0.9047
262 Epoch 11/20
263
264     50/60000 [.....] - ETA: 2s -
    loss: 0.3246 - acc: 0.8600
265     3400/60000 [>.....] - ETA: 0s -
    loss: 0.3324 - acc: 0.9100
266     5650/60000 [=>.....] - ETA: 0s -
    loss: 0.3342 - acc: 0.9090
267     8400/60000 [==>.....] - ETA: 0s -
    loss: 0.3376 - acc: 0.9077
268     11750/60000 [====>.....] - ETA: 0s -
    loss: 0.3454 - acc: 0.9053
269     15000/60000 [=====>.....] - ETA: 0s -
    loss: 0.3404 - acc: 0.9063
270     17550/60000 [=====>.....] - ETA: 0s -
    loss: 0.3417 - acc: 0.9055
271     20550/60000 [=====>.....] - ETA: 0s -
    loss: 0.3414 - acc: 0.9058
272     23850/60000 [=====>.....] - ETA: 0s -
    loss: 0.3367 - acc: 0.9075
273     27150/60000 [=====>.....] - ETA: 0s -
    loss: 0.3371 - acc: 0.9076
274     30450/60000 [=====>.....] - ETA: 0s -
    loss: 0.3376 - acc: 0.9079
275     33050/60000 [=====>.....] - ETA: 0s -
    loss: 0.3362 - acc: 0.9079
276     35900/60000 [=====>.....] - ETA: 0s -
    loss: 0.3369 - acc: 0.9073
277     39150/60000 [=====>.....] - ETA: 0s -
    loss: 0.3367 - acc: 0.9074
278     42450/60000 [=====>.....] - ETA: 0s -
    loss: 0.3366 - acc: 0.9070
279     45750/60000 [=====>.....] - ETA: 0s -
    loss: 0.3367 - acc: 0.9068
280     48400/60000 [=====>.....] - ETA: 0s -
    loss: 0.3368 - acc: 0.9068
281     51150/60000 [=====>.....] - ETA: 0s -
    loss: 0.3371 - acc: 0.9065
282     54400/60000 [=====>...] - ETA: 0s -
    loss: 0.3365 - acc: 0.9063
283     57700/60000 [=====>...] - ETA: 0s -
    loss: 0.3377 - acc: 0.9058
284     60000/60000 [=====] - 1s 17us/
```

```
284 step - loss: 0.3377 - acc: 0.9058
285 Epoch 12/20
286
287    50/60000 [.....] - ETA: 2s -
    loss: 0.2719 - acc: 0.9400
288    2500/60000 [>.....] - ETA: 1s -
    loss: 0.2862 - acc: 0.9232
289    5100/60000 [=>.....] - ETA: 1s -
    loss: 0.3032 - acc: 0.9137
290    8300/60000 [==>.....] - ETA: 0s -
    loss: 0.3191 - acc: 0.9114
291    11700/60000 [====>.....] - ETA: 0s -
    loss: 0.3235 - acc: 0.9099
292    15050/60000 [=====>.....] - ETA: 0s -
    loss: 0.3294 - acc: 0.9081
293    17600/60000 [=====>.....] - ETA: 0s -
    loss: 0.3315 - acc: 0.9083
294    20400/60000 [=====>.....] - ETA: 0s -
    loss: 0.3285 - acc: 0.9090
295    23650/60000 [=====>.....] - ETA: 0s -
    loss: 0.3276 - acc: 0.9093
296    26950/60000 [=====>.....] - ETA: 0s -
    loss: 0.3305 - acc: 0.9077
297    30250/60000 [=====>.....] - ETA: 0s -
    loss: 0.3309 - acc: 0.9072
298    32650/60000 [=====>.....] - ETA: 0s -
    loss: 0.3318 - acc: 0.9068
299    35550/60000 [=====>.....] - ETA: 0s -
    loss: 0.3291 - acc: 0.9078
300    38800/60000 [=====>.....] - ETA: 0s -
    loss: 0.3324 - acc: 0.9068
301    42200/60000 [=====>.....] - ETA: 0s -
    loss: 0.3337 - acc: 0.9061
302    45600/60000 [=====>.....] - ETA: 0s -
    loss: 0.3350 - acc: 0.9055
303    48450/60000 [=====>.....] - ETA: 0s -
    loss: 0.3341 - acc: 0.9060
304    51450/60000 [=====>.....] - ETA: 0s -
    loss: 0.3339 - acc: 0.9065
305    54650/60000 [=====>...] - ETA: 0s -
    loss: 0.3334 - acc: 0.9070
306    57700/60000 [=====>...] - ETA: 0s -
    loss: 0.3336 - acc: 0.9072
307    60000/60000 [=====] - 1s 17us/
step - loss: 0.3331 - acc: 0.9073
308 Epoch 13/20
309
310    50/60000 [.....] - ETA: 2s -
    loss: 0.2934 - acc: 0.9000
311    2350/60000 [>.....] - ETA: 1s -
```

```
311 loss: 0.3232 - acc: 0.9085
312 4950/60000 [=>.....] - ETA: 1s -
loss: 0.3265 - acc: 0.9087
313 7650/60000 [==>.....] - ETA: 1s -
loss: 0.3304 - acc: 0.9084
314 10550/60000 [====>.....] - ETA: 0s -
loss: 0.3287 - acc: 0.9084
315 13650/60000 [=====>.....] - ETA: 0s -
loss: 0.3252 - acc: 0.9099
316 16050/60000 [=====>.....] - ETA: 0s -
loss: 0.3244 - acc: 0.9092
317 18750/60000 [=====>.....] - ETA: 0s -
loss: 0.3223 - acc: 0.9106
318 21800/60000 [=====>.....] - ETA: 0s -
loss: 0.3216 - acc: 0.9112
319 24950/60000 [=====>.....] - ETA: 0s -
loss: 0.3247 - acc: 0.9104
320 28000/60000 [=====>.....] - ETA: 0s -
loss: 0.3248 - acc: 0.9101
321 30400/60000 [=====>.....] - ETA: 0s -
loss: 0.3253 - acc: 0.9101
322 33100/60000 [=====>.....] - ETA: 0s -
loss: 0.3250 - acc: 0.9104
323 36100/60000 [=====>.....] - ETA: 0s -
loss: 0.3274 - acc: 0.9099
324 39050/60000 [=====>.....] - ETA: 0s -
loss: 0.3263 - acc: 0.9098
325 42150/60000 [=====>.....] - ETA: 0s -
loss: 0.3271 - acc: 0.9093
326 44550/60000 [=====>.....] - ETA: 0s -
loss: 0.3268 - acc: 0.9092
327 47350/60000 [=====>.....] - ETA: 0s -
loss: 0.3277 - acc: 0.9088
328 50650/60000 [=====>.....] - ETA: 0s -
loss: 0.3281 - acc: 0.9087
329 53950/60000 [=====>....] - ETA: 0s -
loss: 0.3280 - acc: 0.9087
330 57300/60000 [=====>...] - ETA: 0s -
loss: 0.3276 - acc: 0.9090
331 60000/60000 [=====] - 1s 18us/
step - loss: 0.3291 - acc: 0.9086
332 Epoch 14/20
333
334 50/60000 [.....] - ETA: 2s -
loss: 0.3974 - acc: 0.8800
335 3200/60000 [>.....] - ETA: 0s -
loss: 0.3183 - acc: 0.9106
336 6450/60000 [==>.....] - ETA: 0s -
loss: 0.3163 - acc: 0.9088
337 9700/60000 [==>.....] - ETA: 0s -
```

```
337 loss: 0.3232 - acc: 0.9087
338 12000/60000 [=====>.....] - ETA: 0s -
loss: 0.3220 - acc: 0.9098
339 14700/60000 [=====>.....] - ETA: 0s -
loss: 0.3246 - acc: 0.9090
340 17850/60000 [=====>.....] - ETA: 0s -
loss: 0.3228 - acc: 0.9108
341 21050/60000 [======>.....] - ETA: 0s -
loss: 0.3240 - acc: 0.9110
342 24000/60000 [======>.....] - ETA: 0s -
loss: 0.3239 - acc: 0.9112
343 26500/60000 [======>.....] - ETA: 0s -
loss: 0.3246 - acc: 0.9109
344 28950/60000 [======>.....] - ETA: 0s -
loss: 0.3235 - acc: 0.9118
345 31950/60000 [======>.....] - ETA: 0s -
loss: 0.3258 - acc: 0.9107
346 35250/60000 [======>.....] - ETA: 0s -
loss: 0.3268 - acc: 0.9101
347 38350/60000 [======>.....] - ETA: 0s -
loss: 0.3254 - acc: 0.9101
348 40800/60000 [======>.....] - ETA: 0s -
loss: 0.3263 - acc: 0.9098
349 43650/60000 [======>.....] - ETA: 0s -
loss: 0.3270 - acc: 0.9096
350 46900/60000 [======>.....] - ETA: 0s -
loss: 0.3271 - acc: 0.9093
351 50250/60000 [======>.....] - ETA: 0s -
loss: 0.3268 - acc: 0.9093
352 52600/60000 [======>.....] - ETA: 0s -
loss: 0.3264 - acc: 0.9095
353 55100/60000 [======>.....] - ETA: 0s -
loss: 0.3253 - acc: 0.9101
354 58200/60000 [======>..] - ETA: 0s -
loss: 0.3250 - acc: 0.9100
355 60000/60000 [=====] - 1s 17us/
step - loss: 0.3255 - acc: 0.9098
356 Epoch 15/20
357
358    50/60000 [.....] - ETA: 2s -
loss: 0.2977 - acc: 0.9400
359    3050/60000 [>.....] - ETA: 0s -
loss: 0.3233 - acc: 0.9105
360    5550/60000 [=>.....] - ETA: 1s -
loss: 0.3244 - acc: 0.9083
361    7950/60000 [==>.....] - ETA: 1s -
loss: 0.3299 - acc: 0.9073
362    11000/60000 [==>.....] - ETA: 0s -
loss: 0.3292 - acc: 0.9077
363    14350/60000 [==>.....] - ETA: 0s -
```

```
363 loss: 0.3263 - acc: 0.9086
364 17500/60000 [=====>.....] - ETA: 0s -
loss: 0.3211 - acc: 0.9104
365 20300/60000 [=====>.....] - ETA: 0s -
loss: 0.3210 - acc: 0.9104
366 23250/60000 [=====>.....] - ETA: 0s -
loss: 0.3221 - acc: 0.9090
367 26150/60000 [=====>.....] - ETA: 0s -
loss: 0.3189 - acc: 0.9100
368 29150/60000 [=====>.....] - ETA: 0s -
loss: 0.3191 - acc: 0.9104
369 32250/60000 [=====>.....] - ETA: 0s -
loss: 0.3201 - acc: 0.9110
370 35050/60000 [=====>.....] - ETA: 0s -
loss: 0.3226 - acc: 0.9104
371 38000/60000 [=====>.....] - ETA: 0s -
loss: 0.3233 - acc: 0.9099
372 41200/60000 [=====>.....] - ETA: 0s -
loss: 0.3228 - acc: 0.9099
373 43800/60000 [=====>.....] - ETA: 0s -
loss: 0.3213 - acc: 0.9108
374 46800/60000 [=====>.....] - ETA: 0s -
loss: 0.3221 - acc: 0.9107
375 49500/60000 [=====>.....] - ETA: 0s -
loss: 0.3224 - acc: 0.9106
376 52500/60000 [=====>.....] - ETA: 0s -
loss: 0.3223 - acc: 0.9104
377 55750/60000 [=====>...] - ETA: 0s -
loss: 0.3221 - acc: 0.9102
378 58950/60000 [=====>...] - ETA: 0s -
loss: 0.3222 - acc: 0.9102
379 60000/60000 [=====] - 1s 17us/
step - loss: 0.3223 - acc: 0.9101
380 Epoch 16/20
381
382    50/60000 [.....] - ETA: 3s -
loss: 0.3149 - acc: 0.9000
383    2850/60000 [>.....] - ETA: 1s -
loss: 0.3456 - acc: 0.9042
384    6200/60000 [==>.....] - ETA: 0s -
loss: 0.3228 - acc: 0.9098
385    9500/60000 [==>.....] - ETA: 0s -
loss: 0.3201 - acc: 0.9117
386   12300/60000 [====>.....] - ETA: 0s -
loss: 0.3209 - acc: 0.9111
387   14450/60000 [====>.....] - ETA: 0s -
loss: 0.3201 - acc: 0.9116
388   16950/60000 [====>.....] - ETA: 0s -
loss: 0.3227 - acc: 0.9104
389   20000/60000 [====>.....] - ETA: 0s -
```

```
389 loss: 0.3223 - acc: 0.9110
390 23000/60000 [=====>.....] - ETA: 0s -
    loss: 0.3217 - acc: 0.9111
391 25750/60000 [=====>.....] - ETA: 0s -
    loss: 0.3205 - acc: 0.9108
392 28400/60000 [=====>.....] - ETA: 0s -
    loss: 0.3201 - acc: 0.9110
393 30750/60000 [=====>.....] - ETA: 0s -
    loss: 0.3188 - acc: 0.9113
394 32900/60000 [=====>.....] - ETA: 0s -
    loss: 0.3184 - acc: 0.9116
395 34350/60000 [=====>.....] - ETA: 0s -
    loss: 0.3182 - acc: 0.9113
396 36950/60000 [=====>.....] - ETA: 0s -
    loss: 0.3175 - acc: 0.9117
397 39850/60000 [=====>.....] - ETA: 0s -
    loss: 0.3184 - acc: 0.9114
398 42650/60000 [=====>.....] - ETA: 0s -
    loss: 0.3181 - acc: 0.9113
399 45700/60000 [=====>.....] - ETA: 0s -
    loss: 0.3195 - acc: 0.9110
400 48200/60000 [=====>.....] - ETA: 0s -
    loss: 0.3192 - acc: 0.9112
401 50800/60000 [=====>.....] - ETA: 0s -
    loss: 0.3186 - acc: 0.9118
402 53750/60000 [=====>.....] - ETA: 0s -
    loss: 0.3189 - acc: 0.9116
403 56900/60000 [=====>..] - ETA: 0s -
    loss: 0.3189 - acc: 0.9118
404 60000/60000 [=====] - 1s 18us/
    step - loss: 0.3194 - acc: 0.9112
405 Epoch 17/20
406
407      50/60000 [.....] - ETA: 3s -
    loss: 0.3409 - acc: 0.9200
408 2250/60000 [>.....] - ETA: 1s -
    loss: 0.3148 - acc: 0.9138
409 5000/60000 [=>.....] - ETA: 1s -
    loss: 0.3022 - acc: 0.9172
410 7900/60000 [==>.....] - ETA: 1s -
    loss: 0.3092 - acc: 0.9141
411 10900/60000 [==>.....] - ETA: 0s -
    loss: 0.3134 - acc: 0.9127
412 13450/60000 [==>.....] - ETA: 0s -
    loss: 0.3142 - acc: 0.9123
413 16100/60000 [==>.....] - ETA: 0s -
    loss: 0.3136 - acc: 0.9122
414 19400/60000 [==>.....] - ETA: 0s -
    loss: 0.3166 - acc: 0.9112
415 22750/60000 [==>.....] - ETA: 0s -
```

```
415 loss: 0.3131 - acc: 0.9127
416 26100/60000 [=====>.....] - ETA: 0s -
    loss: 0.3121 - acc: 0.9127
417 28650/60000 [=====>.....] - ETA: 0s -
    loss: 0.3143 - acc: 0.9123
418 31150/60000 [=====>.....] - ETA: 0s -
    loss: 0.3144 - acc: 0.9120
419 34200/60000 [=====>.....] - ETA: 0s -
    loss: 0.3147 - acc: 0.9117
420 37150/60000 [=====>.....] - ETA: 0s -
    loss: 0.3148 - acc: 0.9115
421 39550/60000 [=====>.....] - ETA: 0s -
    loss: 0.3145 - acc: 0.9119
422 41750/60000 [=====>.....] - ETA: 0s -
    loss: 0.3151 - acc: 0.9115
423 44400/60000 [=====>.....] - ETA: 0s -
    loss: 0.3153 - acc: 0.9117
424 47400/60000 [=====>.....] - ETA: 0s -
    loss: 0.3148 - acc: 0.9117
425 50500/60000 [=====>.....] - ETA: 0s -
    loss: 0.3159 - acc: 0.9114
426 53500/60000 [=====>.....] - ETA: 0s -
    loss: 0.3154 - acc: 0.9117
427 56100/60000 [=====>..] - ETA: 0s -
    loss: 0.3149 - acc: 0.9119
428 58850/60000 [=====>.] - ETA: 0s -
    loss: 0.3161 - acc: 0.9118
429 60000/60000 [=====] - 1s 18us/
    step - loss: 0.3168 - acc: 0.9114
430 Epoch 18/20
431
432    50/60000 [.....] - ETA: 2s -
    loss: 0.1632 - acc: 0.9800
433    3150/60000 [>.....] - ETA: 0s -
    loss: 0.3107 - acc: 0.9175
434    6200/60000 [==>.....] - ETA: 0s -
    loss: 0.3116 - acc: 0.9166
435    9000/60000 [==>.....] - ETA: 0s -
    loss: 0.3114 - acc: 0.9148
436    11350/60000 [==>.....] - ETA: 0s -
    loss: 0.3071 - acc: 0.9152
437    14150/60000 [==>.....] - ETA: 0s -
    loss: 0.3060 - acc: 0.9160
438    17150/60000 [==>.....] - ETA: 0s -
    loss: 0.3048 - acc: 0.9158
439    20050/60000 [==>.....] - ETA: 0s -
    loss: 0.3103 - acc: 0.9153
440    22400/60000 [==>.....] - ETA: 0s -
    loss: 0.3106 - acc: 0.9149
441    25250/60000 [==>.....] - ETA: 0s -
```

```
441 loss: 0.3110 - acc: 0.9145
442 28200/60000 [=====>.....] - ETA: 0s -
    loss: 0.3107 - acc: 0.9139
443 31200/60000 [=====>.....] - ETA: 0s -
    loss: 0.3116 - acc: 0.9136
444 33750/60000 [=====>.....] - ETA: 0s -
    loss: 0.3115 - acc: 0.9138
445 36550/60000 [=====>.....] - ETA: 0s -
    loss: 0.3117 - acc: 0.9132
446 39500/60000 [=====>.....] - ETA: 0s -
    loss: 0.3113 - acc: 0.9134
447 42650/60000 [=====>.....] - ETA: 0s -
    loss: 0.3124 - acc: 0.9134
448 45850/60000 [=====>.....] - ETA: 0s -
    loss: 0.3113 - acc: 0.9136
449 48650/60000 [=====>.....] - ETA: 0s -
    loss: 0.3134 - acc: 0.9129
450 51500/60000 [=====>.....] - ETA: 0s -
    loss: 0.3138 - acc: 0.9131
451 54550/60000 [=====>...] - ETA: 0s -
    loss: 0.3144 - acc: 0.9129
452 57600/60000 [=====>...] - ETA: 0s -
    loss: 0.3147 - acc: 0.9130
453 60000/60000 [=====] - 1s 18us/
    step - loss: 0.3145 - acc: 0.9127
454 Epoch 19/20
455
456    50/60000 [.....] - ETA: 3s -
    loss: 0.3205 - acc: 0.9200
457    2900/60000 [>.....] - ETA: 1s -
    loss: 0.3088 - acc: 0.9197
458    5950/60000 [=>.....] - ETA: 0s -
    loss: 0.3183 - acc: 0.9160
459    9050/60000 [==>.....] - ETA: 0s -
    loss: 0.3192 - acc: 0.9134
460    12000/60000 [==>.....] - ETA: 0s -
    loss: 0.3177 - acc: 0.9127
461    14200/60000 [==>.....] - ETA: 0s -
    loss: 0.3164 - acc: 0.9119
462    16650/60000 [==>.....] - ETA: 0s -
    loss: 0.3207 - acc: 0.9107
463    19700/60000 [==>.....] - ETA: 0s -
    loss: 0.3152 - acc: 0.9118
464    22900/60000 [==>.....] - ETA: 0s -
    loss: 0.3192 - acc: 0.9108
465    26150/60000 [==>.....] - ETA: 0s -
    loss: 0.3211 - acc: 0.9103
466    28700/60000 [==>.....] - ETA: 0s -
    loss: 0.3197 - acc: 0.9104
467    31300/60000 [==>.....] - ETA: 0s -
```

```
467 loss: 0.3206 - acc: 0.9107
468 34650/60000 [=====>.....] - ETA: 0s -
loss: 0.3174 - acc: 0.9118
469 37850/60000 [=====>.....] - ETA: 0s -
loss: 0.3146 - acc: 0.9127
470 41150/60000 [=====>.....] - ETA: 0s -
loss: 0.3140 - acc: 0.9127
471 43800/60000 [=====>.....] - ETA: 0s -
loss: 0.3131 - acc: 0.9129
472 46800/60000 [=====>.....] - ETA: 0s -
loss: 0.3128 - acc: 0.9131
473 50100/60000 [=====>....] - ETA: 0s -
loss: 0.3131 - acc: 0.9130
474 53400/60000 [=====>....] - ETA: 0s -
loss: 0.3126 - acc: 0.9131
475 56050/60000 [=====>..] - ETA: 0s -
loss: 0.3121 - acc: 0.9131
476 58900/60000 [=====>..] - ETA: 0s -
loss: 0.3119 - acc: 0.9131
477 60000/60000 [=====] - 1s 17us/
step - loss: 0.3122 - acc: 0.9130
478 Epoch 20/20
479
480 50/60000 [.....] - ETA: 2s -
loss: 0.2364 - acc: 0.9400
481 3300/60000 [>.....] - ETA: 0s -
loss: 0.3247 - acc: 0.9112
482 6600/60000 [==>.....] - ETA: 0s -
loss: 0.3119 - acc: 0.9152
483 9500/60000 [==>.....] - ETA: 0s -
loss: 0.3102 - acc: 0.9157
484 11750/60000 [==>.....] - ETA: 0s -
loss: 0.3116 - acc: 0.9147
485 14750/60000 [==>.....] - ETA: 0s -
loss: 0.3091 - acc: 0.9160
486 18150/60000 [=====>.....] - ETA: 0s -
loss: 0.3102 - acc: 0.9160
487 21550/60000 [=====>.....] - ETA: 0s -
loss: 0.3098 - acc: 0.9152
488 24500/60000 [=====>.....] - ETA: 0s -
loss: 0.3119 - acc: 0.9142
489 27300/60000 [=====>.....] - ETA: 0s -
loss: 0.3153 - acc: 0.9121
490 30650/60000 [=====>.....] - ETA: 0s -
loss: 0.3149 - acc: 0.9115
491 33950/60000 [=====>.....] - ETA: 0s -
loss: 0.3160 - acc: 0.9115
492 37250/60000 [=====>.....] - ETA: 0s -
loss: 0.3150 - acc: 0.9118
493 40000/60000 [=====>.....] - ETA: 0s -
```

```
493 loss: 0.3161 - acc: 0.9111
494 43000/60000 [=====>.....] - ETA: 0s -
    loss: 0.3139 - acc: 0.9122
495 46250/60000 [=====>.....] - ETA: 0s -
    loss: 0.3129 - acc: 0.9124
496 49550/60000 [=====>.....] - ETA: 0s -
    loss: 0.3125 - acc: 0.9126
497 52850/60000 [=====>....] - ETA: 0s -
    loss: 0.3110 - acc: 0.9133
498 55500/60000 [=====>...] - ETA: 0s -
    loss: 0.3109 - acc: 0.9133
499 58250/60000 [=====>.] - ETA: 0s -
    loss: 0.3098 - acc: 0.9134
500 60000/60000 [=====] - 1s 16us/
    step - loss: 0.3102 - acc: 0.9134
501
502     32/10000 [.....] - ETA: 5s
503 5472/10000 [=====>.....] - ETA: 0s
504 10000/10000 [=====] - 0s 11us/
    step
505 Summary: Loss over the test dataset: 0.30, Accuracy: 0.92
506
507 Process finished with exit code 0
508
```