Generation : 0

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 114s 2ms/step - loss: 0.4892 - acc: 0.8400 - val\_loss: 0.0754 - val\_acc: 0.9774

Epoch 2/3

60000/60000 [==============================] - 109s 2ms/step - loss: 0.1720 - acc: 0.9488 - val\_loss: 0.0563 - val\_acc: 0.9829

Epoch 3/3

60000/60000 [==============================] - 106s 2ms/step - loss: 0.1397 - acc: 0.9591 - val\_loss: 0.0517 - val\_acc: 0.9836

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 280s 5ms/step - loss: 0.3570 - acc: 0.8834 - val\_loss: 0.0532 - val\_acc: 0.9829

Epoch 2/3

60000/60000 [==============================] - 278s 5ms/step - loss: 0.1319 - acc: 0.9598 - val\_loss: 0.0381 - val\_acc: 0.9882

Epoch 3/3

60000/60000 [==============================] - 278s 5ms/step - loss: 0.1037 - acc: 0.9675 - val\_loss: 0.0341 - val\_acc: 0.9892

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 202s 3ms/step - loss: 0.6134 - acc: 0.7997 - val\_loss: 0.1240 - val\_acc: 0.9597

Epoch 2/3

60000/60000 [==============================] - 201s 3ms/step - loss: 0.2879 - acc: 0.9143 - val\_loss: 0.0942 - val\_acc: 0.9707

Epoch 3/3

60000/60000 [==============================] - 201s 3ms/step - loss: 0.2274 - acc: 0.9311 - val\_loss: 0.0646 - val\_acc: 0.9801

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 454s 8ms/step - loss: 0.5250 - acc: 0.8303 - val\_loss: 0.0624 - val\_acc: 0.9803

Epoch 2/3

60000/60000 [==============================] - 453s 8ms/step - loss: 0.2268 - acc: 0.9306 - val\_loss: 0.0442 - val\_acc: 0.9866

Epoch 3/3

60000/60000 [==============================] - 455s 8ms/step - loss: 0.1850 - acc: 0.9444 - val\_loss: 0.0401 - val\_acc: 0.9869

Generation : 1

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 280s 5ms/step - loss: 0.3385 - acc: 0.8917 - val\_loss: 0.0649 - val\_acc: 0.9794

Epoch 2/3

60000/60000 [==============================] - 279s 5ms/step - loss: 0.1279 - acc: 0.9610 - val\_loss: 0.0397 - val\_acc: 0.9867

Epoch 3/3

60000/60000 [==============================] - 282s 5ms/step - loss: 0.1013 - acc: 0.9692 - val\_loss: 0.0403 - val\_acc: 0.9873

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 456s 8ms/step - loss: 0.5564 - acc: 0.8164 - val\_loss: 0.0660 - val\_acc: 0.9807

Epoch 2/3

60000/60000 [==============================] - 454s 8ms/step - loss: 0.2336 - acc: 0.9289 - val\_loss: 0.0437 - val\_acc: 0.9865

Epoch 3/3

60000/60000 [==============================] - 454s 8ms/step - loss: 0.1925 - acc: 0.9402 - val\_loss: 0.0396 - val\_acc: 0.9890

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 278s 5ms/step - loss: 0.5411 - acc: 0.8213 - val\_loss: 0.0655 - val\_acc: 0.9781

Epoch 2/3

60000/60000 [==============================] - 275s 5ms/step - loss: 0.2293 - acc: 0.9313 - val\_loss: 0.0516 - val\_acc: 0.9840

Epoch 3/3

60000/60000 [==============================] - 277s 5ms/step - loss: 0.1865 - acc: 0.9435 - val\_loss: 0.0377 - val\_acc: 0.9883

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 444s 7ms/step - loss: 0.3375 - acc: 0.8904 - val\_loss: 0.0529 - val\_acc: 0.9840

Epoch 2/3

60000/60000 [==============================] - 443s 7ms/step - loss: 0.1260 - acc: 0.9616 - val\_loss: 0.0368 - val\_acc: 0.9875

Epoch 3/3

60000/60000 [==============================] - 451s 8ms/step - loss: 0.1008 - acc: 0.9693 - val\_loss: 0.0306 - val\_acc: 0.9900

Generation : 2

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 443s 7ms/step - loss: 0.3513 - acc: 0.8871 - val\_loss: 0.0557 - val\_acc: 0.9828

Epoch 2/3

60000/60000 [==============================] - 442s 7ms/step - loss: 0.1310 - acc: 0.9595 - val\_loss: 0.0404 - val\_acc: 0.9863

Epoch 3/3

60000/60000 [==============================] - 444s 7ms/step - loss: 0.1044 - acc: 0.9677 - val\_loss: 0.0288 - val\_acc: 0.9910

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 283s 5ms/step - loss: 0.5529 - acc: 0.8194 - val\_loss: 0.0689 - val\_acc: 0.9792

Epoch 2/3

60000/60000 [==============================] - 275s 5ms/step - loss: 0.2362 - acc: 0.9280 - val\_loss: 0.0497 - val\_acc: 0.9838

Epoch 3/3

60000/60000 [==============================] - 275s 5ms/step - loss: 0.1942 - acc: 0.9405 - val\_loss: 0.0415 - val\_acc: 0.9861

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 449s 7ms/step - loss: 0.5478 - acc: 0.8202 - val\_loss: 0.0640 - val\_acc: 0.9803

Epoch 2/3

60000/60000 [==============================] - 1557s 26ms/step - loss: 0.2323 - acc: 0.9299 - val\_loss: 0.0488 - val\_acc: 0.9833

Epoch 3/3

60000/60000 [==============================] - 449s 7ms/step - loss: 0.1854 - acc: 0.9437 - val\_loss: 0.0360 - val\_acc: 0.9890

Train on 60000 samples, validate on 10000 samples

Epoch 1/3

60000/60000 [==============================] - 277s 5ms/step - loss: 0.3515 - acc: 0.8866 - val\_loss: 0.0597 - val\_acc: 0.9812

Epoch 2/3

60000/60000 [==============================] - 279s 5ms/step - loss: 0.1316 - acc: 0.9595 - val\_loss: 0.0456 - val\_acc: 0.9853

Epoch 3/3

60000/60000 [==============================] - 275s 5ms/step - loss: 0.1032 - acc: 0.9677 - val\_loss: 0.0325 - val\_acc: 0.9887

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G0: 0.9836-----0.9892-----0.9801-----0.9869 Avg:0.98495

G1: 0.9873-----0.9890-----0.9883-----0.9900 Avg:0.98865

G2: 0.9910-----0.9861-----0.9890-----0.9887 Avg:0.9887