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      "import tensorflow \n",
      "from tensorflow.keras.datasets import mnist \n",
      "from tensorflow.keras.models import Sequential \n",
      "from tensorflow.keras import layers \n",
      "from tensorflow.keras.layers import Dense, Flatten n,
```

```
"from tensorflow.keras.layers import Conv2D \n",
    "from keras. utils import np utils n,
    "import matplotlib.pyplot as plt
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    "x_train=x_train.reshape (60000, 28, 28, 1).astype('float32')\n",
    "x test=x test.reshape (10000, 28, 28, 1).astype ('float32')\n",
    "\n",
    "x train.shape"
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    "number of classes = 10 n",
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"y train = np utils.to categorical (y train, number of classes)
\n",
        "y_test = np_utils.to_categorical (y_test, number_of_classes)"
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        "model=Sequential ()\n",
        "model.add(Conv2D(64, (3, 3), input shape=(28, 28, 1),
activation='relu'))\n",
        "model.add(Conv2D(32, (3, 3), activation = 'relu'))\n",
        "\n",
        "model.add(Flatten()) \n",
        "model.add(Dense(number of classes,activation = 'softmax'))"
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optimizer=\"Adam\", metrics=['accuracy'])"
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0.9727 \n'',
         "Epoch 2/5\n",
         - loss: 0.0633 - accuracy: 0.9806 - val loss: 0.0812 - val accuracy:
0.9751\n",
         "Epoch 3/5\n",
         - loss: 0.0451 - accuracy: 0.9863 - val loss: 0.0776 - val accuracy:
0.9780\n'',
         "Epoch 4/5\n",
         - loss: 0.0313 - accuracy: 0.9905 - val loss: 0.1089 - val accuracy:
0.9736\n",
         "Epoch 5/5\n",
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- loss: 0.0277 - accuracy: 0.9917 - val_loss: 0.0893 - val accuracy:
0.9779\n"
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       "prediction=model.predict(x test[6000:6001]) \n",
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1.0295421e-06\n",
           " 2.3502807e-11 6.7067222e-20 1.2130131e-07 2.3948130e-07
9.9999857e-01]]\n"
         ]
        }
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       "print(np.argmax(prediction, axis=1))"
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"np.argmax(y test[6000:6001])"
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