```
%tensorflow_version 2.x
!pip uninstall -y keras
import math
import numpy as np
import matplotlib.pyplot as plt
import tensorflow as tf
import tensorflow.keras.layers as layers
from tensorflow.keras.datasets.mnist import load_data

# load the data - it returns 2 tuples of digits & labels - one for
# the train set & the other for the test set
(train_digits, train_labels), (test_digits, test_labels) = load_data()

# display 14 random images from the training set
np.random.seed(123)

# code to view the images
def display1(digits, labels):
    num_cols = len(digits)
    plt.clf()
    f, ax = plt.subplots(1, num_cols, figsize=(11,5),
                         gridspec_kw={'wspace':0.03, 'hspace':0.01},
                         squeeze=True)

    for c in range(num_cols):
            ax[c].axis("off")
            ax[c].imshow(digits[c], cmap='gray')
            ax[c].set_title('No. %s' % str(labels[c]))
    plt.show()
    plt.close()

def displayN(digits, labels):
    num_rows, num_cols = len(digits), len(digits[0])
    plt.clf()
    f, ax = plt.subplots(num_rows, num_cols, figsize=(12,5),
                         gridspec_kw={'wspace':0.03, 'hspace':0.01},
                         squeeze=True)

    for r in range(num_rows):
        for c in range(num_cols):
            ax[r,c].axis("off")
            ax[r,c].imshow(digits[r][c], cmap='gray')
            if r == 0:
                ax[r,c].set_title('No. %s' % str(labels[r][c]))
    plt.show()
    plt.close()

```