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import time
import board
import digitalio
from adafruit_max7219 import matrices

# You may need to change the chip select pin depending on your wiring
spi = board.SPI()
cs = digitalio.DigitalInOut(board.D4)
matrix = matrices.Matrix8x8(spi, cs)

while True:
    print("Cycle start")
    # All lit up
    matrix.fill(True)
    matrix.show()
    time.sleep(0.5)

    # All off
    matrix.fill(False)
    matrix.show()
    time.sleep(0.5)

    # One column of LEDs lit
    for i in range(8):
        matrix.pixel(1, i, 1)
        matrix.show()
        time.sleep(0.5)

    # Now scroll the column to the right
    for j in range(8):
        matrix.scroll(1, 0)
        matrix.show()
        time.sleep(0.5)

    # Show a string one character at a time
    adafruit = "123456789"
    for char in adafruit:
        matrix.fill(0)
        matrix.text(char, 0, 0)
        matrix.show()
        time.sleep(1.0)

    # Scroll the last character off the display
    for i in range(8):

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matrix.scroll(-1, 0)
matrix.show()
time.sleep(0.5)
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# Scroll a string across the display
for pixel_position in range(len(adafruit) * 8):
    matrix.fill(0)
    matrix.text(adafruit, -pixel_position, 0)
    matrix.show()
    time.sleep(0.25)
```