#include <Adafruit\_NeoPixel.h>

#define PINF 2 // input pin Neopixel is attached to

#define PINS 4

#define PINT 7

#define NUMPIXELS 57 // number of neopixels in strip

Adafruit\_NeoPixel pixelsF = Adafruit\_NeoPixel(NUMPIXELS, PINF, NEO\_GRB + NEO\_KHZ800);

Adafruit\_NeoPixel pixelsS = Adafruit\_NeoPixel(NUMPIXELS, PINS, NEO\_GRB + NEO\_KHZ800);

Adafruit\_NeoPixel pixelsT = Adafruit\_NeoPixel(14, PINT, NEO\_GRB + NEO\_KHZ800);

void setup()

{

// Initialize the NeoPixel library.

pixelsF.begin();

pixelsS.begin();

pixelsT.begin();

}

void loop()

{

//StartUp

for (int i=0; i < 19; i++)

{

pixelsS.setPixelColor(i, pixelsS.Color(255, 0, 0));

pixelsS.show();

delay(0.01);

}

noTone(8);

for (int i=0; i < 7; i++)

{

pixelsT.setPixelColor(i, pixelsT.Color(255, 0, 0));

pixelsT.show();

delay(0.01);

}

//StartUp of the first traffic light

for (int i=0; i < 19; i++)

{

pixelsF.setPixelColor(i, pixelsF.Color(255, 0, 0));

pixelsF.show();

delay(0.01);

}

{

for (int i=19; i < 38; i++)

{

pixelsF.setPixelColor(i, pixelsF.Color(255, 255, 0));

pixelsF.show();

delay(0.01);

}

delay(1500);

}

for (int i=0; i < 38; i++)

{

pixelsF.setPixelColor(i, pixelsF.Color(0, 0, 0));

pixelsF.show();

delay(0.01);

}

for (int i=38; i < 57; i++)

{

pixelsF.setPixelColor(i, pixelsF.Color(0, 255, 0));

pixelsF.show();

delay(0.01);

}

delay(10000);

for (int i=38; i < 57; i++)

{

pixelsF.setPixelColor(i, pixelsF.Color(0, 0, 0));

pixelsF.show();

delay(0.01);

}

for (int i=19; i < 38; i++)

{

pixelsF.setPixelColor(i, pixelsF.Color(255, 255, 0));

pixelsF.show();

delay(0.01);

}

delay(1500);

for (int i=19; i < 38; i++)

{

pixelsF.setPixelColor(i, pixelsF.Color(0, 0, 0));

pixelsF.show();

delay(0.01);

}

for (int i=0; i < 19; i++)

{

pixelsF.setPixelColor(i, pixelsF.Color(255, 0, 0));

pixelsF.show();

delay(0.01);

}

//StartUp of the second traffic light

{

for (int i=19; i < 38; i++)

{

pixelsS.setPixelColor(i, pixelsS.Color(255, 255, 0));

pixelsS.show();

delay(0.01);

}

delay(1500);

}

for (int i=0; i < 38; i++)

{

pixelsS.setPixelColor(i, pixelsS.Color(0, 0, 0));

pixelsS.show();

delay(0.01);

}

for (int i=38; i < 57; i++)

{

pixelsS.setPixelColor(i, pixelsS.Color(0, 255, 0));

pixelsS.show();

delay(0.01);

}

delay(10000);

for (int i=38; i < 57; i++)

{

pixelsS.setPixelColor(i, pixelsS.Color(0, 0, 0));

pixelsS.show();

delay(0.01);

}

for (int i=19; i < 38; i++)

{

pixelsS.setPixelColor(i, pixelsS.Color(255, 255, 0));

pixelsS.show();

delay(0.01);

}

delay(1500);

for (int i=19; i < 38; i++)

{

pixelsS.setPixelColor(i, pixelsS.Color(0, 0, 0));

pixelsS.show();

delay(0.01);

}

for (int i=0; i < 19; i++)

{

pixelsS.setPixelColor(i, pixelsS.Color(255, 0, 0));

pixelsS.show();

delay(0.01);

}

//StartUp of the pedestrian traffic light

for (int i=0; i < 7; i++)

{

pixelsT.setPixelColor(i, pixelsT.Color(0, 0, 0));

pixelsT.show();

delay(0.01);

}

{

for (int i=7; i < 14; i++)

{

pixelsT.setPixelColor(i, pixelsT.Color(0, 255, 0));

pixelsT.show();

delay(0.01);

}

tone(8, 880);

delay(10000);

}

noTone(8);

for (int i=7; i < 14; i++)

{

pixelsT.setPixelColor(i, pixelsT.Color(0, 0, 0));

pixelsT.show();

delay(0.01);

}

}