Code

# Super Simple Earthquake Detector for ESP32

from machine import TouchPad, Pin

from time import sleep

from neopixel import NeoPixel

dataPin= 12

pixels=16

np= NeoPixel(Pin(dataPin,Pin.OUT),pixels)

blue= (0,0,225)

red= (225,0,0)

led1= Pin(12,Pin.OUT)

led2= Pin(5,Pin.OUT)

led3= Pin(18,Pin.OUT)

led4= Pin(17,Pin.OUT)

led\_pins=[4,5,18,17]

# Set up LED (built-in LED on ESP32)

led = Pin(2, Pin.OUT)

# Set up touch sensor on GPIO 4

touch = TouchPad(Pin(4))

# Get normal reading when starting

normal\_reading = touch.read()

print("Starting value:", normal\_reading)

# Main loop

while True:

# Get current reading

current = touch.read()

# Check if there's a big change in reading

if abs(current - normal\_reading) > 50: # 50 is sensitivity - lower = more sensitive

# Earthquake detected! Turn on LED

print("Shake detected!", current)

led.on()

sleep(1)

led.off()

# Small delay

sleep(0.1)# Write your code here :-)

for i in range(0,pixels):

if (current<250):

np[i]=blue

np.write()

else:

np[i]=red

np.write()