#include "Arduino.h"

#include <ESP8266WiFi.h>

int sensor\_pin = A0;

int output\_value ;

const char\* ssid = "pap";

    const char\* password = "123456789";

    uint8\_t connection\_state = 0;

    uint16\_t reconnect\_interval = 10000;

uint8\_t WiFiConnect(const char\* nSSID = nullptr, const char\* nPassword = nullptr)

{

    static uint16\_t attempt = 0;

    Serial.print("Connecting to ");

    if(nSSID) {

        WiFi.begin(nSSID, nPassword);

        Serial.println(nSSID);

    }

    uint8\_t i = 0;

    while(WiFi.status()!= WL\_CONNECTED && i++ < 50)

    {

        delay(200);

        Serial.print(".");

    }

    ++attempt;

    Serial.println("");

    if(i == 51) {

        Serial.print("Connection: TIMEOUT on attempt: ");

        Serial.println(attempt);

        if(attempt % 2 == 0)

            Serial.println("Check if access point available or SSID and Password\r\n");

        return false;

    }

    Serial.println("Connection: ESTABLISHED");

    Serial.print("Got IP address: ");

    Serial.println(WiFi.localIP());

    return true;

}

void Awaits()

{

    uint32\_t ts = millis();

    while(!connection\_state)

    {

        delay(50);

        if(millis() > (ts + reconnect\_interval) && !connection\_state){

            connection\_state = WiFiConnect();

            ts = millis();

        }

    }

}

void setup() {

  Serial.begin(115200);

  connection\_state = WiFiConnect(ssid, password);

    if(!connection\_state)

        Awaits();

  Serial.println("Reading From the Sensor ...");

  delay(2000);

  }

void loop() {

  output\_value= analogRead(sensor\_pin);

  output\_value = map(output\_value,550,0,0,100);

  Serial.print("Moisture : ");

  Serial.print(output\_value);

  Serial.println("%");

  delay(1000);

  }