|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27  28  29  30  31  32  33  34  35  36  37  38  39  40  41  42  43  44  45  46  47  48  49  50  51  52  53  54  55  56  57  58  59  60  61  62  63  64  65  66  67  68  69  70  71  72  73  74  75  76  77  78  79  80  81  82  83 | //https://www.electroniclinic.com/  // Download Libraries: https://www.electroniclinic.com/arduino-libraries-download-and-projects-they-are-used-in-project-codes/    #include "ThingSpeak.h"  #include "secrets.h"  #include <ESP8266WiFi.h>    char ssid[] = SECRET\_SSID;   // your network SSID (name)  char pass[] = SECRET\_PASS;   // your network password  int keyIndex = 0;            // your network key Index number (needed only for WEP)  WiFiClient  client;    unsigned long myChannelNumber = SECRET\_CH\_ID;  const char \* myWriteAPIKey = SECRET\_WRITE\_APIKEY;    // Initialize our values  int number1 = 0;  int number2 = random(0,100);  int number3 = random(0,100);  int number4 = random(0,100);  String myStatus = "";    void setup() {    Serial.begin(115200);  // Initialize serial      WiFi.mode(WIFI\_STA);    ThingSpeak.begin(client);  // Initialize ThingSpeak  }    void loop() {      // Connect or reconnect to WiFi    if(WiFi.status() != WL\_CONNECTED){      Serial.print("Attempting to connect to SSID: ");      Serial.println(SECRET\_SSID);      while(WiFi.status() != WL\_CONNECTED){        WiFi.begin(ssid, pass);  // Connect to WPA/WPA2 network. Change this line if using open or WEP network        Serial.print(".");        delay(5000);      }      Serial.println("\nConnected.");    }      // set the fields with the values    ThingSpeak.setField(1, number1);    ThingSpeak.setField(2, number2);    ThingSpeak.setField(3, number3);    ThingSpeak.setField(4, number4);      // figure out the status message    if(number1 > number2){      myStatus = String("field1 is greater than field2");    }    else if(number1 < number2){      myStatus = String("field1 is less than field2");    }    else{      myStatus = String("field1 equals field2");    }      // set the status    ThingSpeak.setStatus(myStatus);      // write to the ThingSpeak channel    int x = ThingSpeak.writeFields(myChannelNumber, myWriteAPIKey);    if(x == 200){      Serial.println("Channel update successful.");    }    else{      Serial.println("Problem updating channel. HTTP error code " + String(x));    }      // change the values    number1++;    if(number1 > 99){      number1 = 0;    }    number2 = random(0,100);    number3 = random(0,100);    number4 = random(0,100);      delay(20000); // Wait 20 seconds to update the channel again  } |