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#include <ESP8266WiFi.h> // ESP8266WiFi.h library

const char* ssid      = "REPLACE_WITH_YOUR_SSID";
const char* password = "REPLACE_WITH_YOUR_PASSWORD";
const char* host = "api.thingspeak.com";
const char* writeAPIKey = "069D4U6O7QBSWZP8";

int temp;

void setup()
{
    // Initialize the sensor:
    pinMode(2, OUTPUT);
    pinMode(4, INPUT);

    Serial.begin(115200); // Initialize serial communication (UART) with baud rate of
1,15,200 bps
    delay(1000);

    // Connect to WiFi network:
    WiFi.begin(ssid, password);

    // Wait until Wifi connection is established:
    while (WiFi.status() != WL_CONNECTED)
    {
        delay(500);
    }
}

// The loop function runs over and over again forever:
void loop()
{
    temp = analogRead(A0); // Read ADC value from A0

    // Make TCP (Transmission Control Protocol) Connections:
    WiFiClient client;
    const int httpPort = 80;

    // Wait until the Client (NodeMCU) is connected to the Thingspeak Server:
    if (!client.connect(host, httpPort))
    {
        return;
    }

    // Request to the server:
    client.println(sendThingspeak());
    delay(1000);
}

```

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if (temp >= 700)
{
    digitalWrite(2, HIGH);
}
else
{
    digitalWrite(2, LOW);
}

Serial.print(temp);
Serial.print("\n");
}

// Send the ADC value from Client (NodeMCU) to Thingspeak Server in HTML Format:
String sendThingspeak()
{
    String command =
        String("GET ") +
        "/update?key=" +
        writeAPIKey +
        "&field1=" +
        String(temp) + "\r\n" +
        "HTTP/1.1 200 OK\r\n" +
        "Host: " + host + "\r\n" +
        "Connection: close\r\n\r\n";
    return command;
}

```