LAB # 09

Q. A temperature sensor with Arduino and Send its data to Thingspeak Channel via NodeMCU

#include <ESP8266WiFi.h>

#include <WiFiClient.h>

#include <ThingSpeak.h>

#include <SoftwareSerial.h>

const char\* ssid = "IMP";

const char\* apiKey = "yyyyyyyy";

WiFiClient client;

void setup() {

  Serial.begin(115200);

  delay(10);

  Serial.println();

  Serial.print("Connecting to ");

  Serial.println(ssid);

  WiFi.begin(ssid);

  while (WiFi.status() != WL\_CONNECTED) {

delay(500);

Serial.print(".");

}

Serial.println("");

Serial.println("WiFi connected");

ThingSpeak.begin(client);

Serial.begin(115200);

}

void loop() {

  Serial.println("Start");

if (Serial.available() > 0)

{

String tempValue = Serial.readStringUntil('\n');

tempValue.trim();

float temperature = tempValue.toFloat();

Serial.println("in Between");

if (isnan(temperature)){

  Serial.println("Invalid Temperature value received");

  return;

}

ThingSpeak.writeField(2555013, 1 , temperature, apiKey);

Serial.print("Temp send to ThingSpeak");

Serial.println(temperature);

}

delay(1000);

}

