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;
}
```

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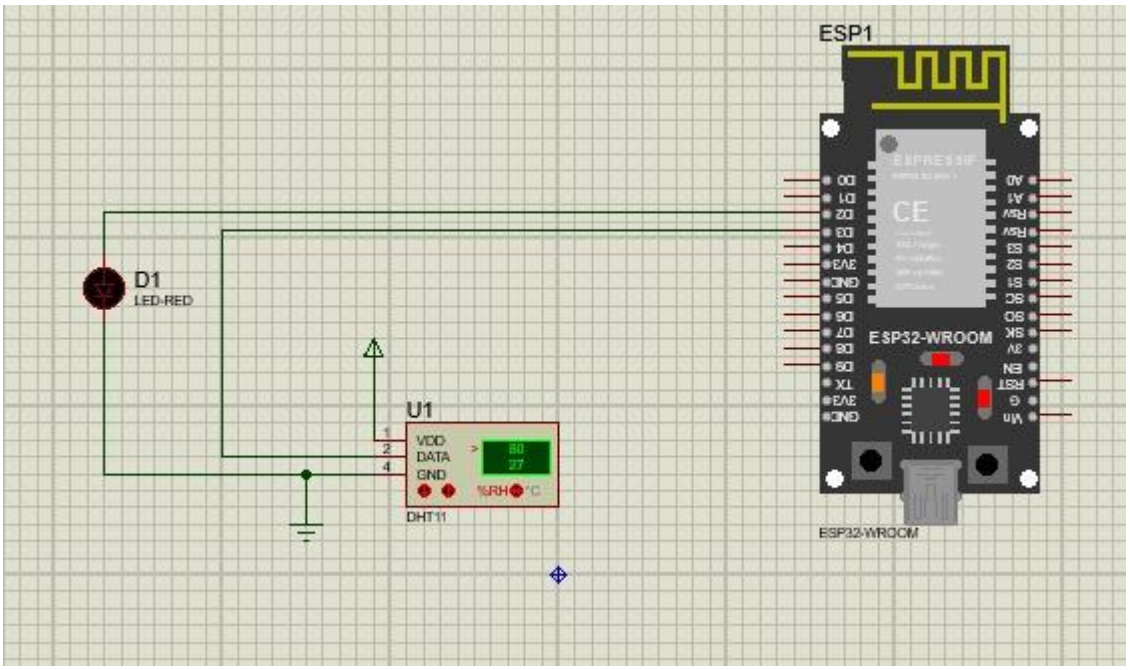
```
ThingSpeak.writeField(2555013, 1 , temperature, apiKey);
Serial.print("Temp send to ThingSpeak");
Serial.println(temperature);
}
delay(1000);
}
```



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