Exercise 15 ThingSpeak

s214417 Lukas Schou

s214413 Christian Cederhorn

```
#include <ESP8266WiFi.h>
    #include <ThingSpeak.h>
    const char* ssid = "Lukas telefon";
     const char* pass = "11111111";
 5
 7
     WiFiClient client;
     unsigned long channelID = 2397414;
                                             //your TS channal
 9
     const char* APIKey = "7AK685PVDZJP7CLW"; //your TS API
10
     const char* server = "api.thingspeak.com";
11
12
     const int postDelay = 1 * 1000; //post data every 20 seconds
13
14
    void setup() {
     Serial.begin(115200);
15
16
     pinMode(D2, OUTPUT);
     pinMode(D3, INPUT);
17
18
     WiFi.begin(ssid, pass);
19
20
21
     float data; //measured data
22
     void loop() {
23
24
      digitalWrite(D2, LOW);
25
      if (digitalRead(D2) == 1) {
       data = 1;
26
27
28
       else {
29
       data = 0;
30
       long rssi = WiFi.RSSI();
32
33
34
       ThingSpeak.begin(client);
       client.connect(server, 80); //connect(URL, Port)
35
36
37
       ThingSpeak.setField(1, data);
                                                  //set data on the X graph
38
       ThingSpeak.setField(2, rssi);
                                                   //set data on the X graph
       ThingSpeak.writeFields(channelID, APIKey); //post everything to TS
39
40
       //ThingSpeak.setField(2, data, rssi);
                                                            //set data on the X graph
41
       //ThingSpeak.writeFields(channelID, APIKey); //post everything to TS
42
43
       client.stop();
44
       delay(postDelay); //wait and then post again
45
46
```

