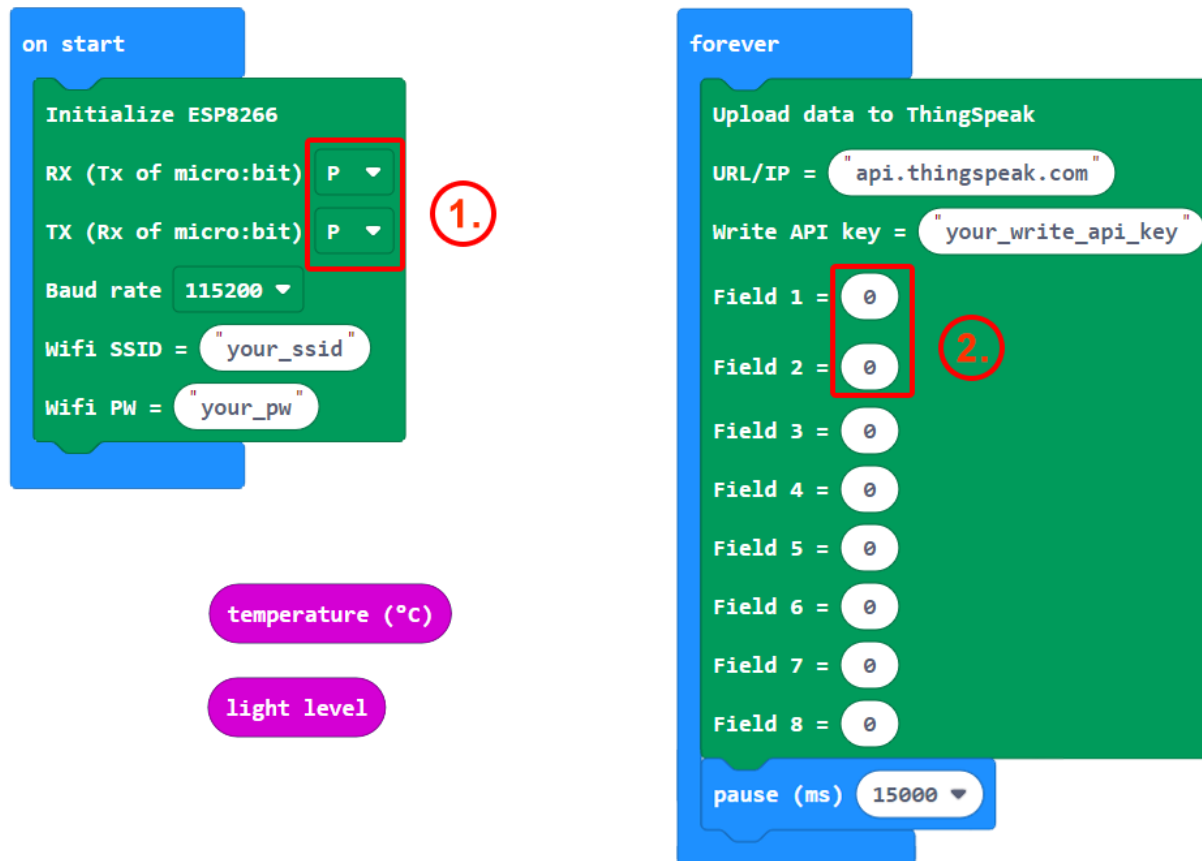


Activity 1: Programming the ESP8266 Wi-Fi module

Programming the ESP8266 Wi-Fi module for the 1st Activity



on start

- Initialize ESP8266
 - RX (Tx of micro:bit) P
 - TX (Rx of micro:bit) P
 - Baud rate 115200
 - Wifi SSID = "your_ssid"
 - Wifi PW = "your_pw"

temperature (°C)

light level

forever

- Upload data to ThingSpeak
 - URL/IP = "api.thingspeak.com"
 - Write API key = "your_write_api_key"
 - Field 1 = 0
 - Field 2 = 0
 - Field 3 = 0
 - Field 4 = 0
 - Field 5 = 0
 - Field 6 = 0
 - Field 7 = 0
 - Field 8 = 0
- pause (ms) 15000

The script on the left is half-baked. Open the Makecode programming environment and try to assemble the script in order to enable the ESP8266 Wi-Fi module to monitor the received data.

In the field with number 1., declare the pins of the micro:bit that the RX and TX pins are connected.

In the field with number 2., drag and drop the **input** blocks of command that will enable the module to monitor the temperature and the light level recorded by the micro:bit.

Note 1: In the fields "Wifi SSID", Wifi PW" and "Write API key", the corresponding information needs to be added (i.e., your WiFi's name and password, and the API key from your ThingSpeak account)

Note 2: The **pause** command is added to enable a smoother data transmission to the ThingSpeak platform