香港教育大學
The Education University of Hong Kong

FACULTY OF LIBERAL ARTS AND SOCIAL SCIENCES
博文及社會科學學院

科學與環境學系
Department of Science and Environmental Studies

2024-2025 Quality Education Fund Thematic Network - Tertiary Institutes

Progressive Development of STEAM Literacy through STEAM Education and Self-directed Learning

透過STEAM教育自主學習有序發展STEAM素養

IoT濕度測試

馬頭涌官立小學

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目錄

01 ThingSpeak IoT 介紹

02 IoT編程

03 所需配件

04 裝置設置

ThingSpeakIoT

https://thingspeak.mathworks.com/

ThingSpeak™ Channels Apps Support Commercial Use How to Buy

To use ThingSpeak, you must sign in with your existing MathWorks account or create a new one.

Non-commercial users may use ThingSpeak for free. Free accounts offer limits on certain functionality. Commercial users are eligible for a time-limited free evaluation. To get full access to the MATLAB analysis features on ThingSpeak, log in to ThingSpeak using the email address associated with your university or organization.

To send data faster to ThingSpeak or to send more data from more devices, consider the paid license options for commercial, academic, home and student usage.

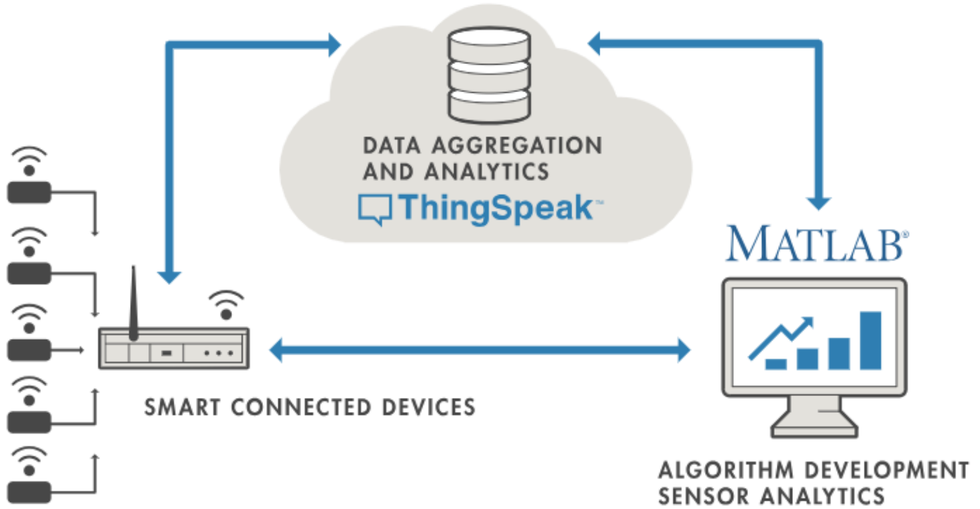
MathWorks

Email

No account? Create one!

By signing in, you agree to our privacy policy.

Next



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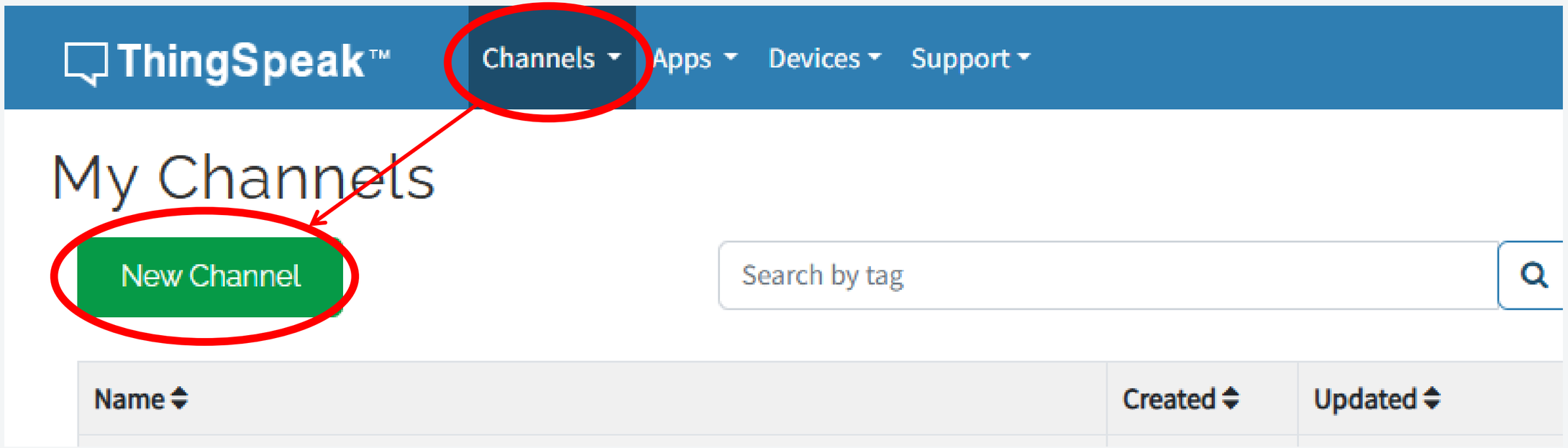
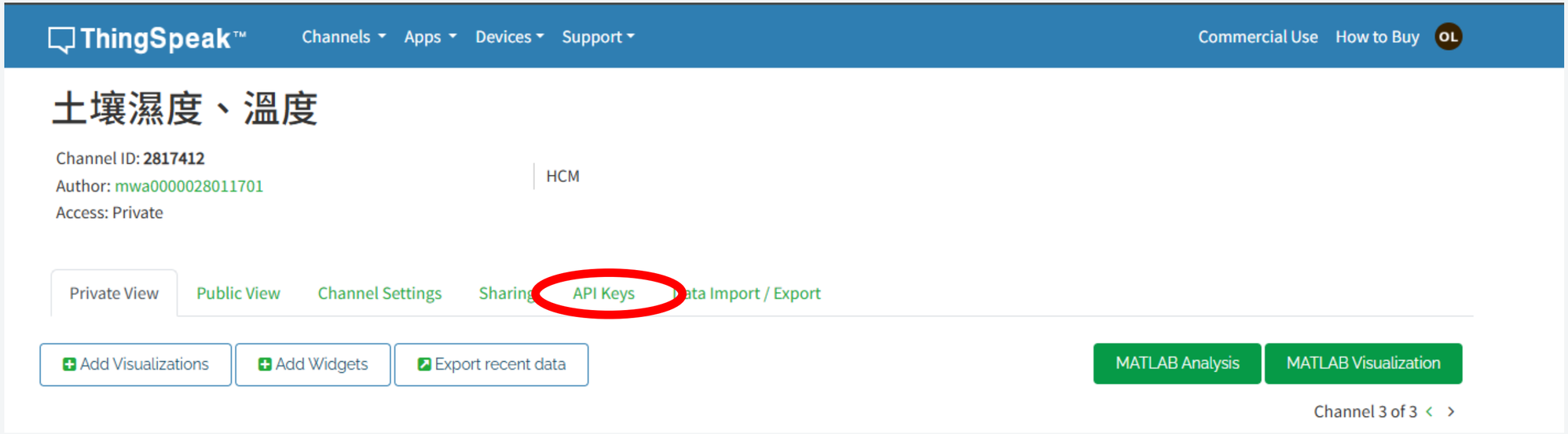


Copy the API Key



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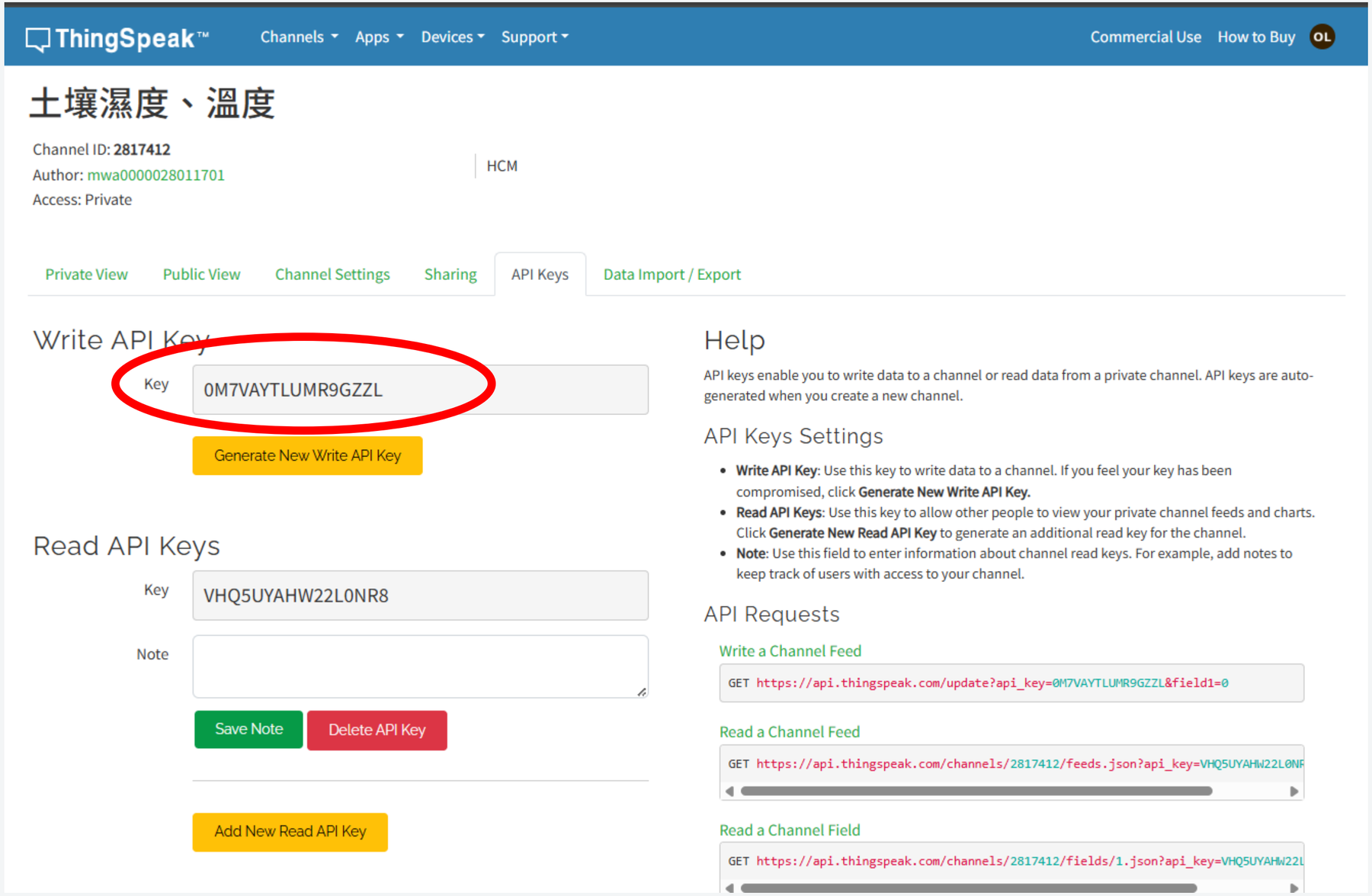

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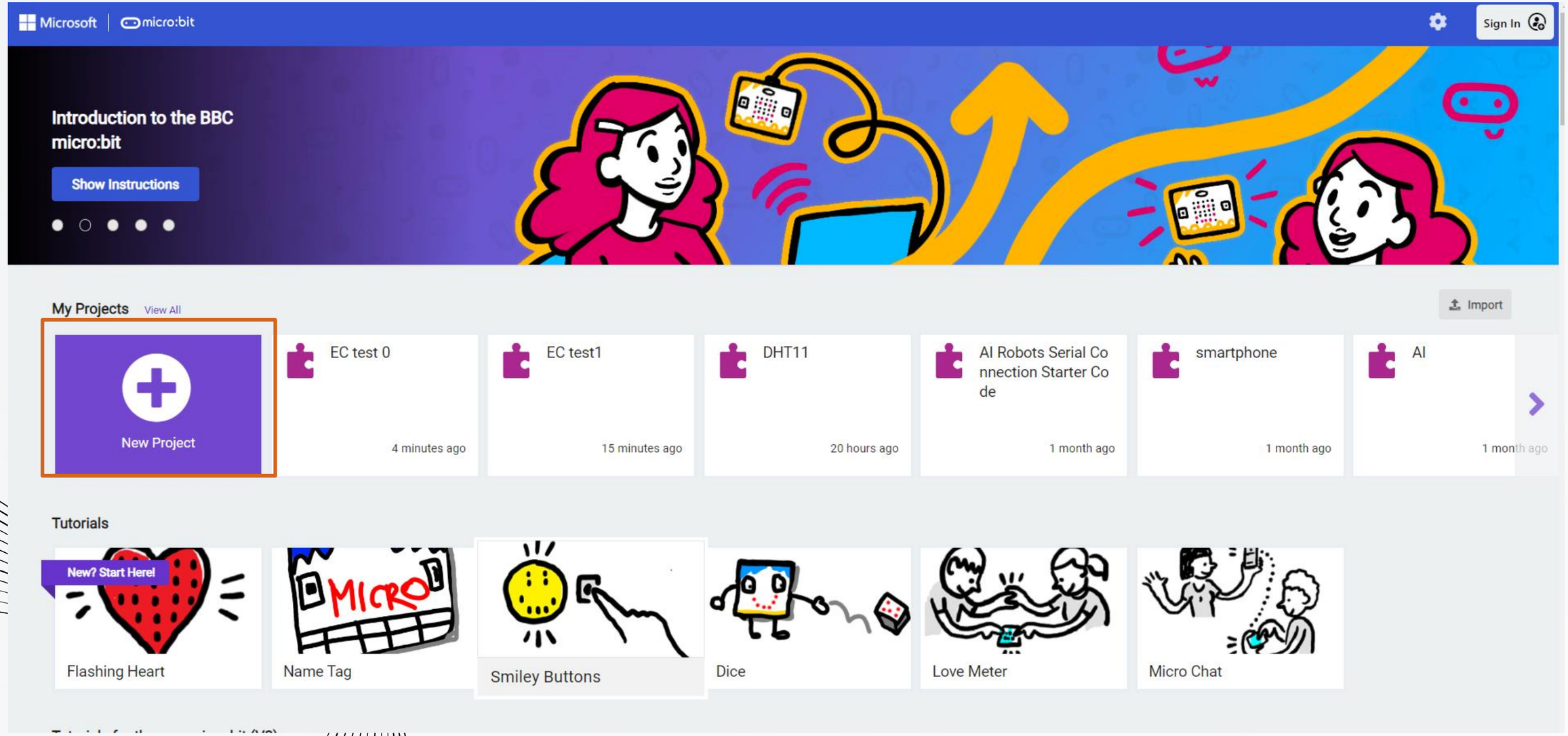
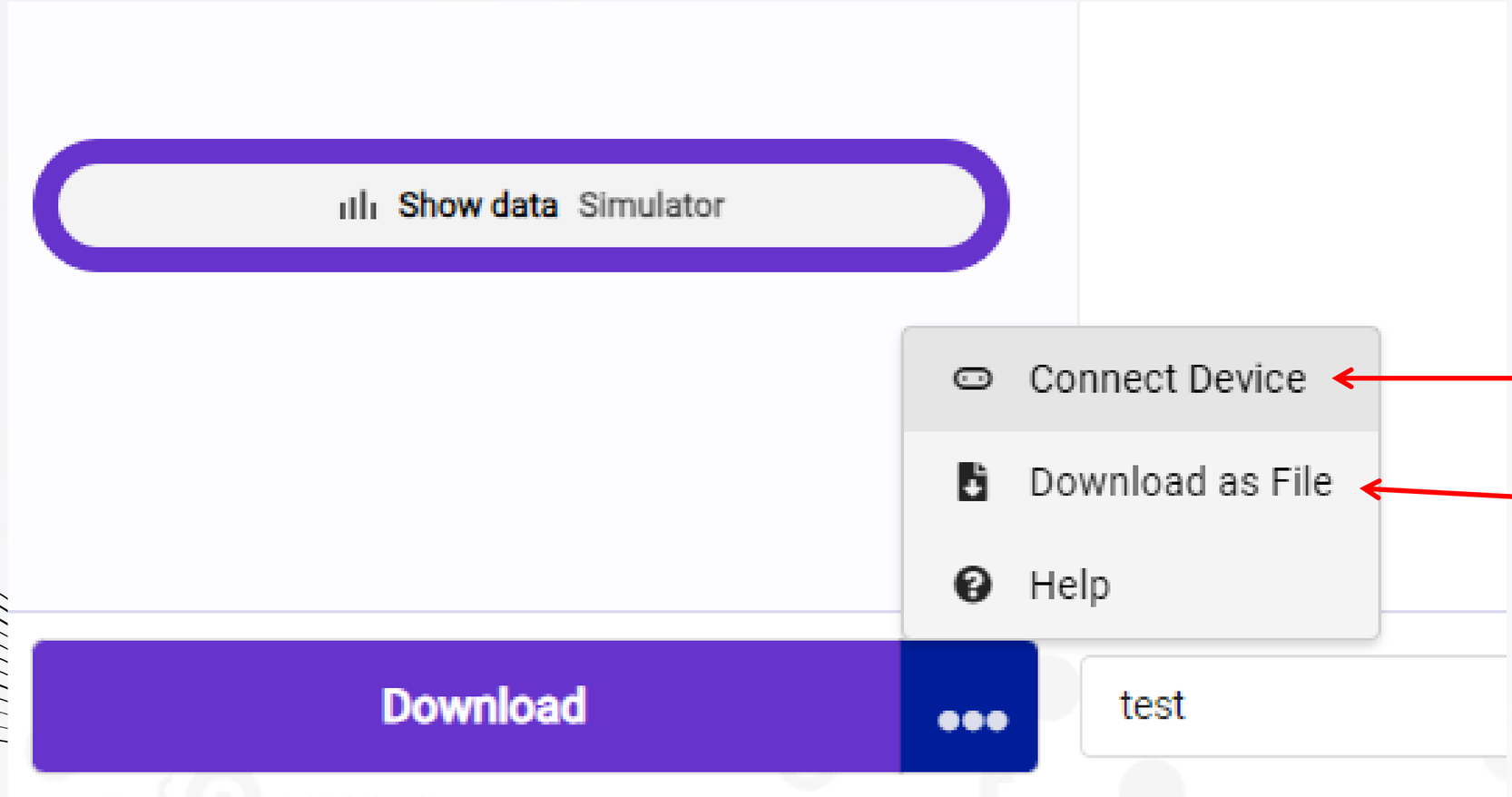
Makecode

https://makecode.microbit.org/#



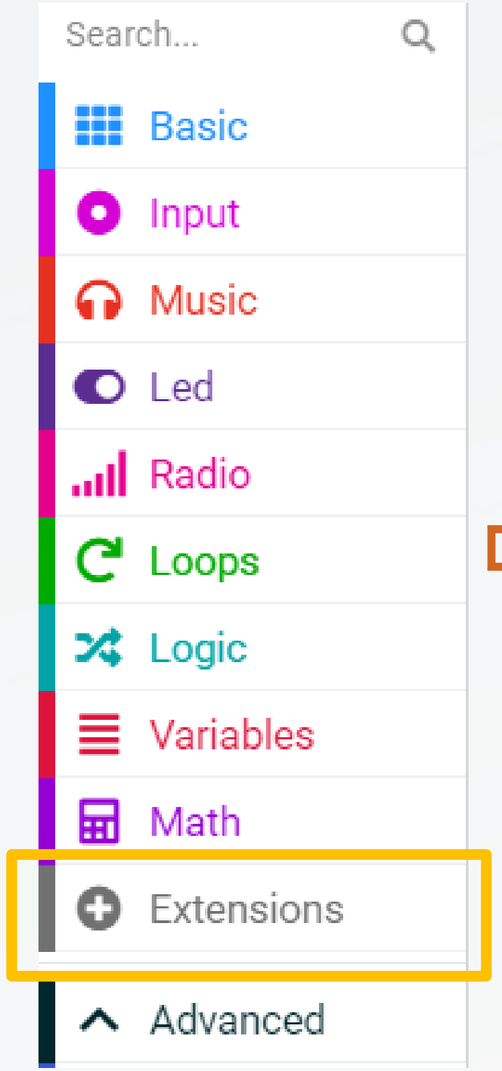
How to connect with micro:bit?



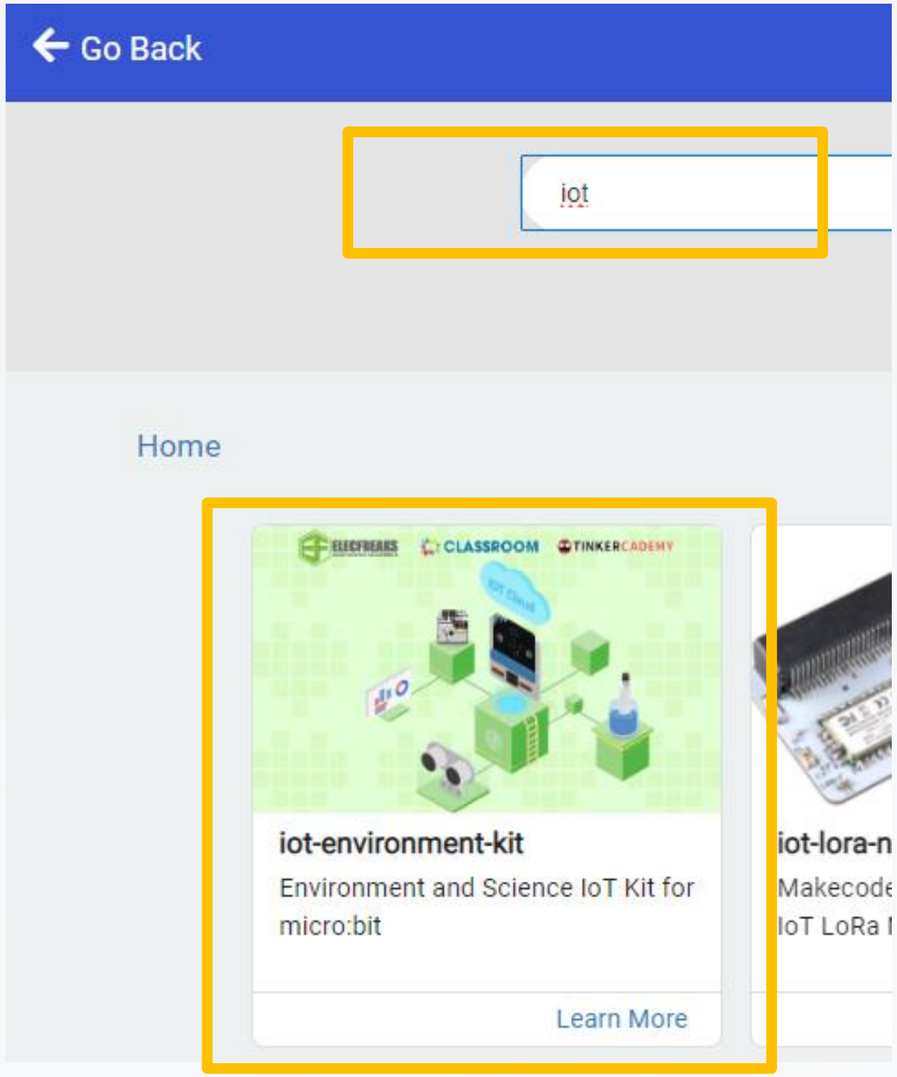
1. Connect Device
2. Download

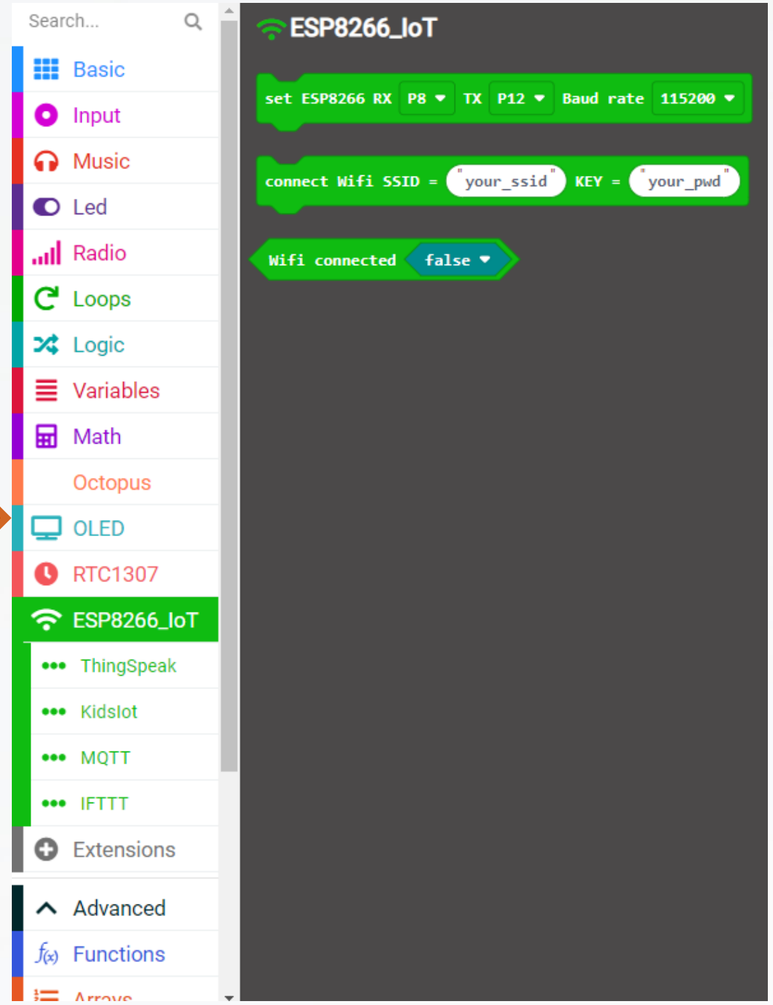
Add extensions to Makecode

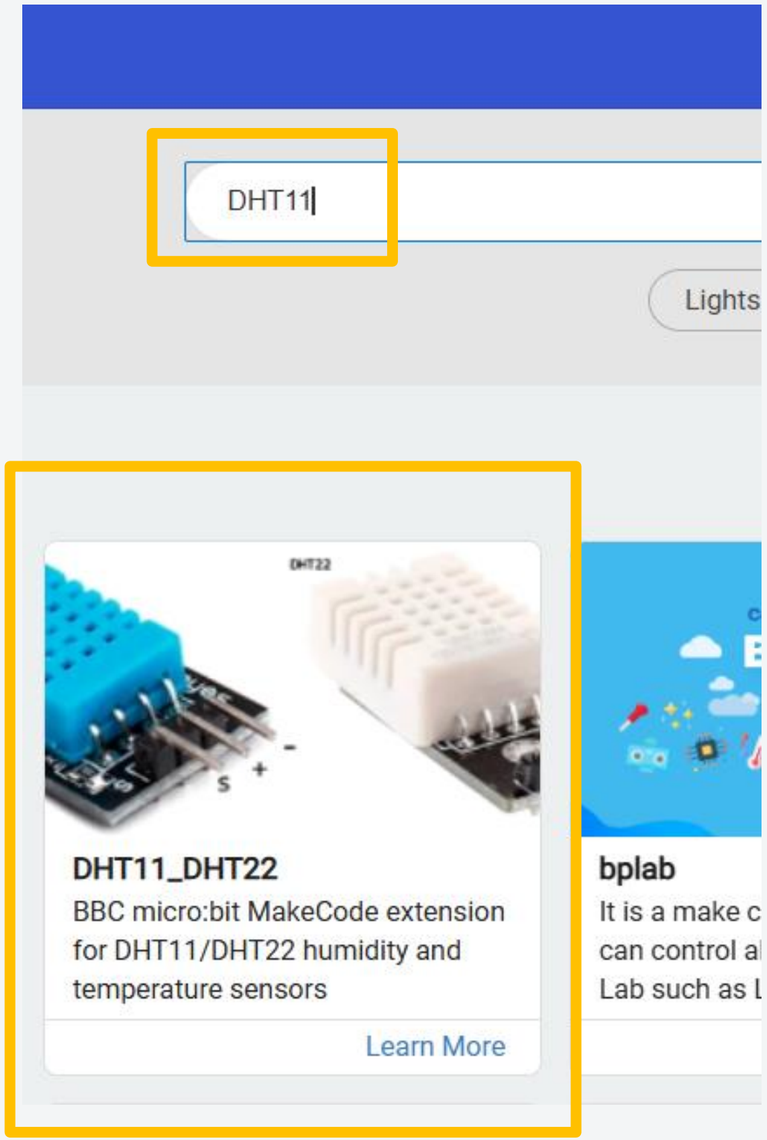
1. Click "Extensions"

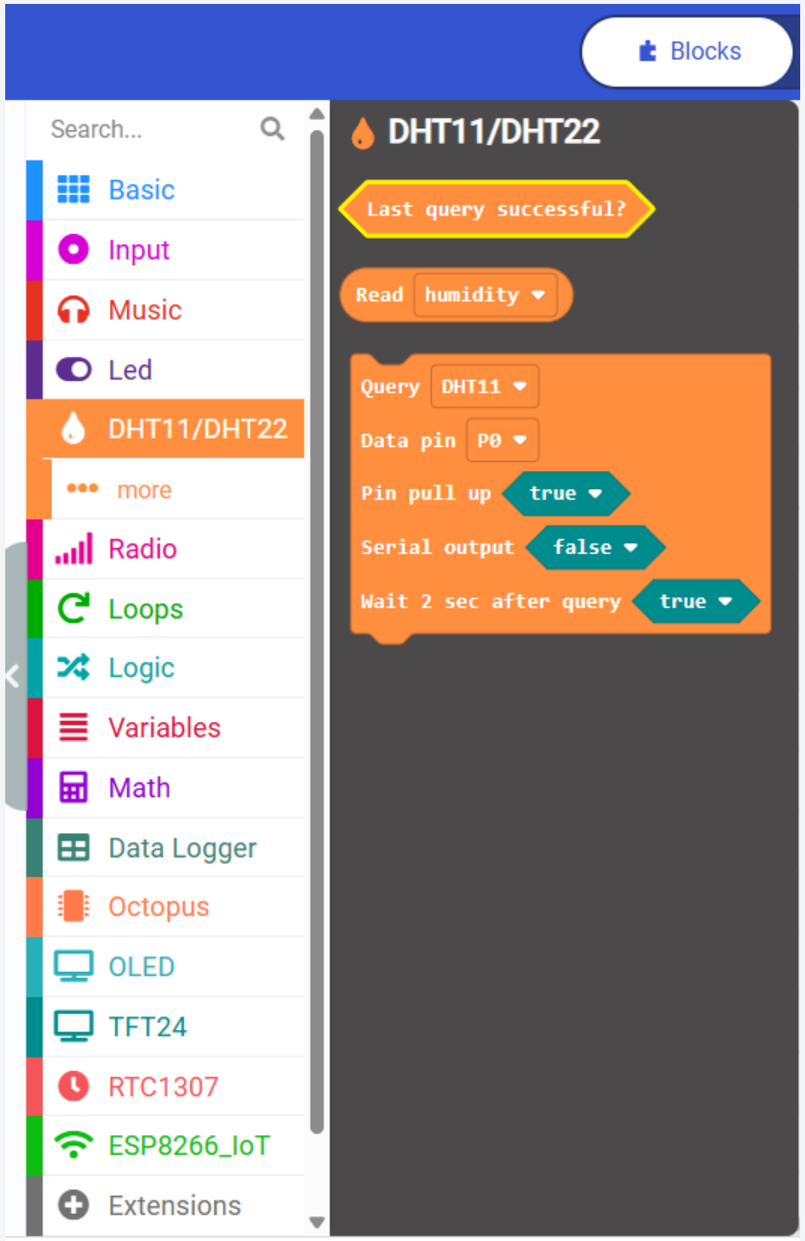


2. Search "iot" and choose "datalogger"






DHT11
Lights
DHT11_DHT22
BBC micro:bit MakeCode extension for DHT11/DHT22 humidity and temperature sensors
Learn More
bplab
It is a make c
can control a
Lab such as L


Blocks
Search...
Basic
Input
Music
Led
DHT11/DHT22
more
Radio
Loops
Logic
Variables
Math
Data Logger
Octopus
OLED
TFT24
RTC1307
ESP8266_IoT
Extensions
DHT11/DHT22
Last query successful?
Read humidity
Query DHT11
Data pin P0
Pin pull up true
Serial output false
Wait 2 sec after query true

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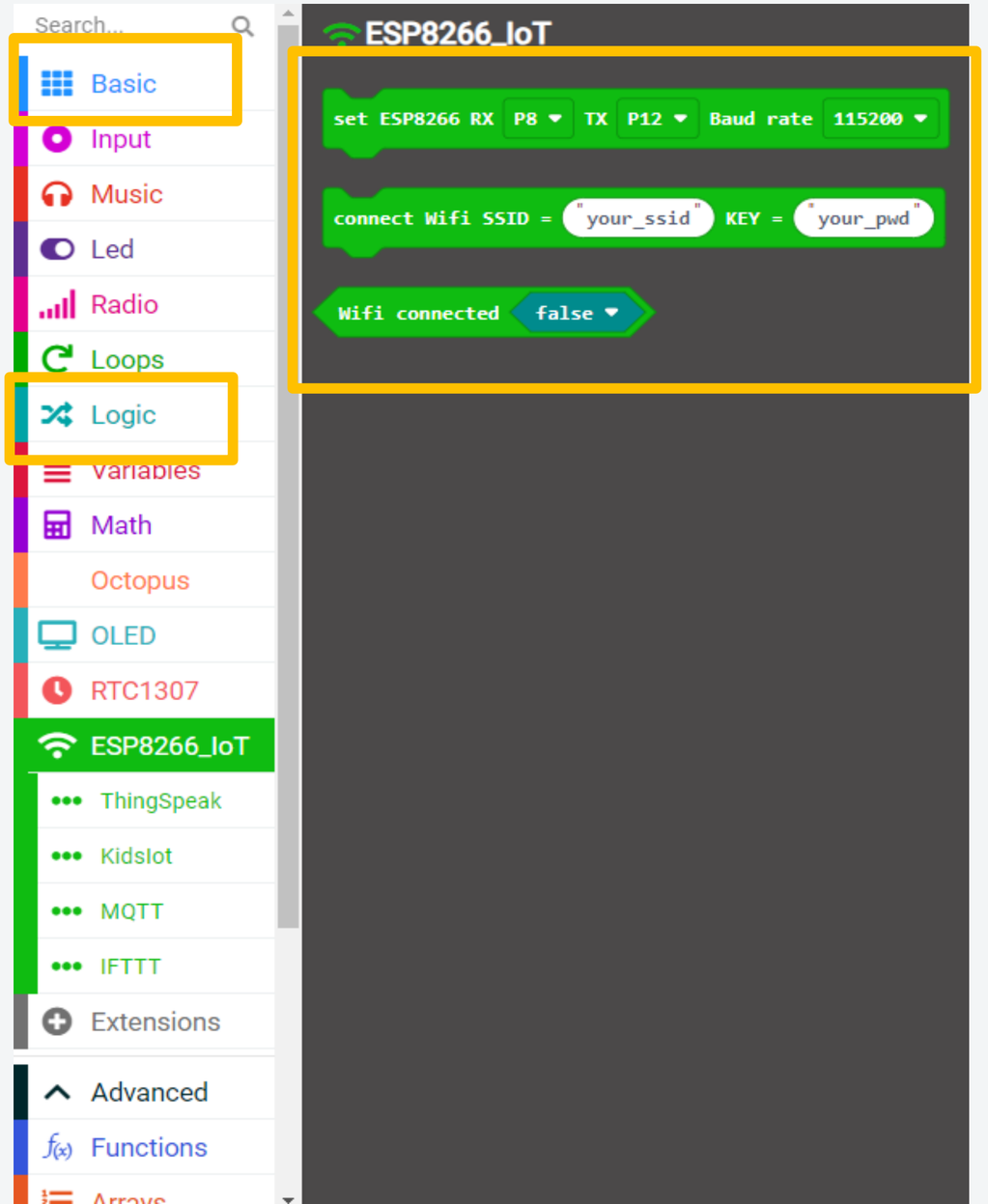

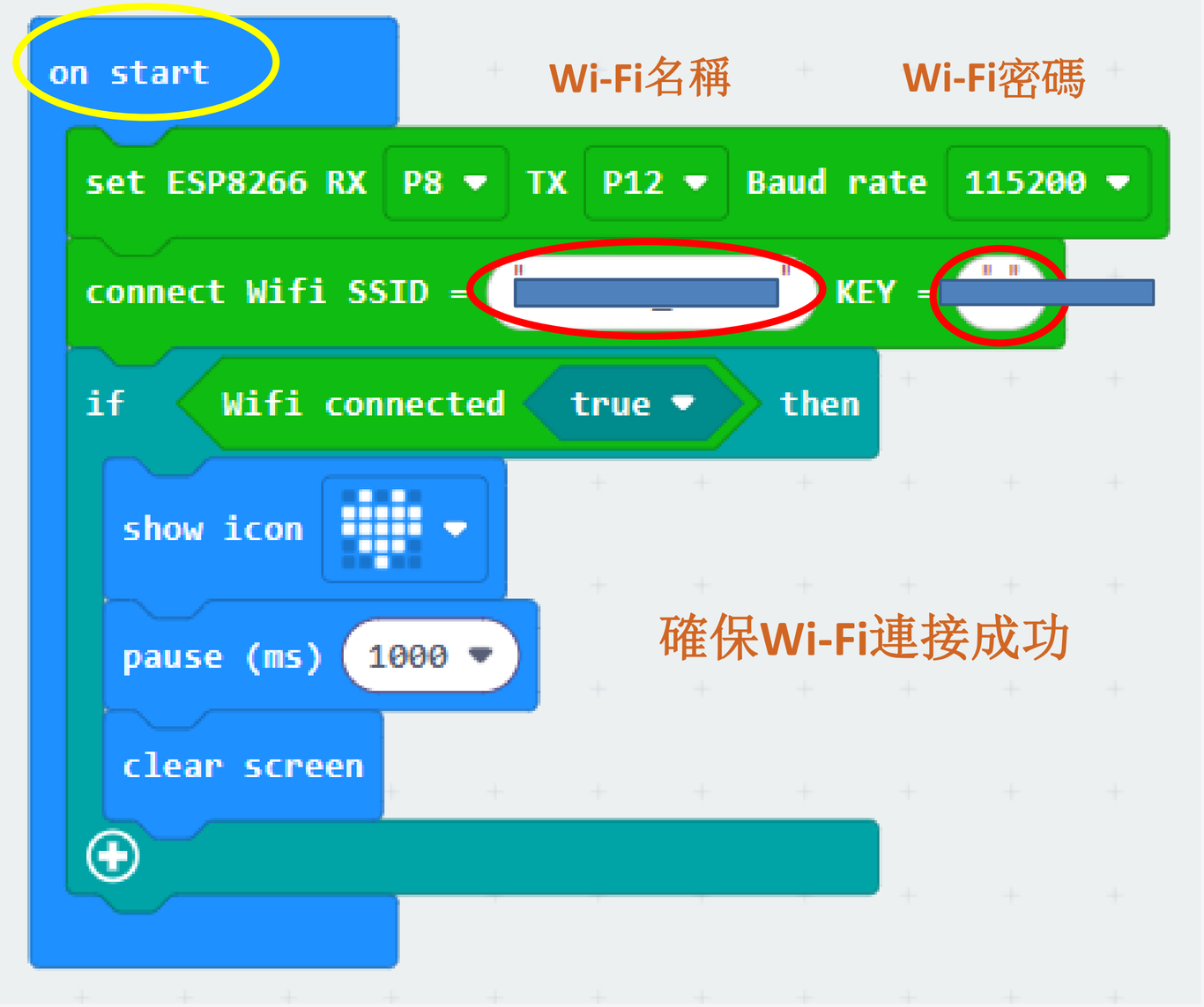

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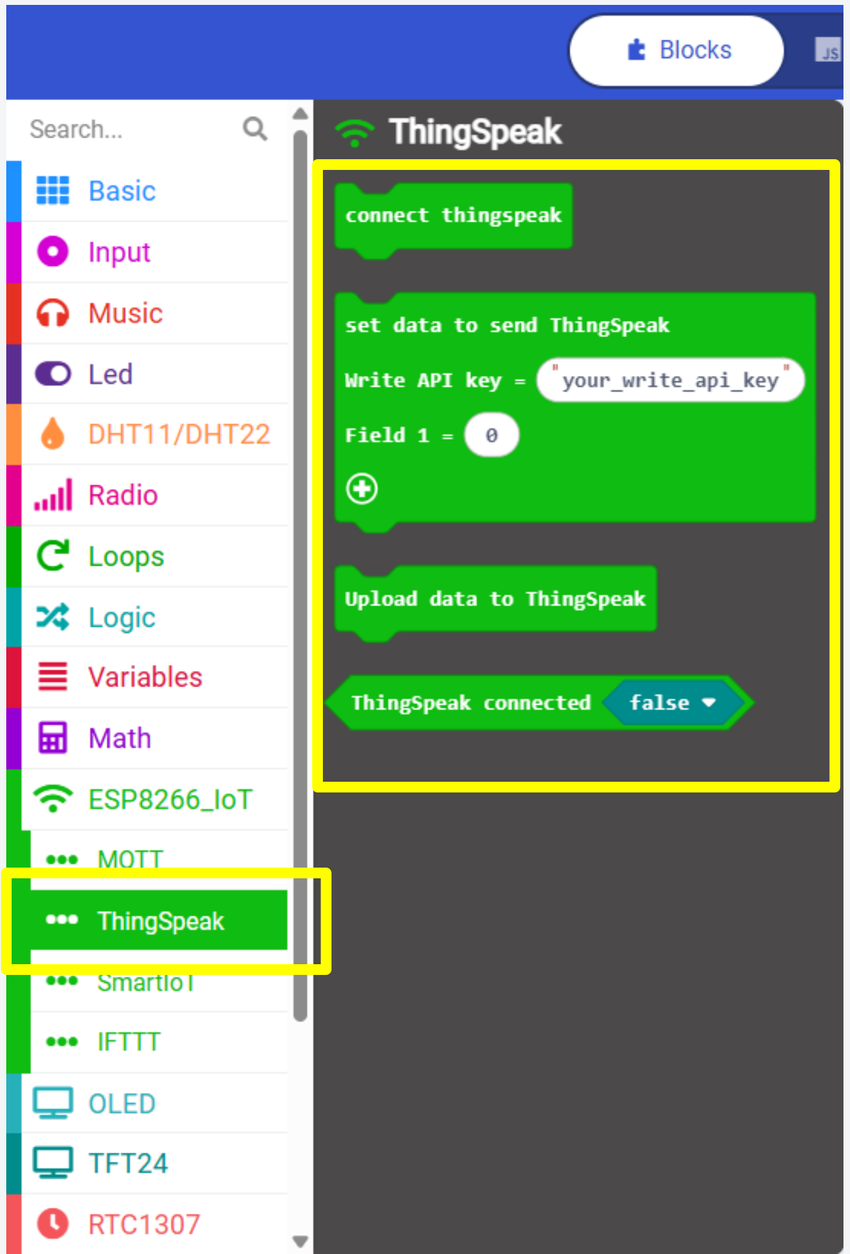
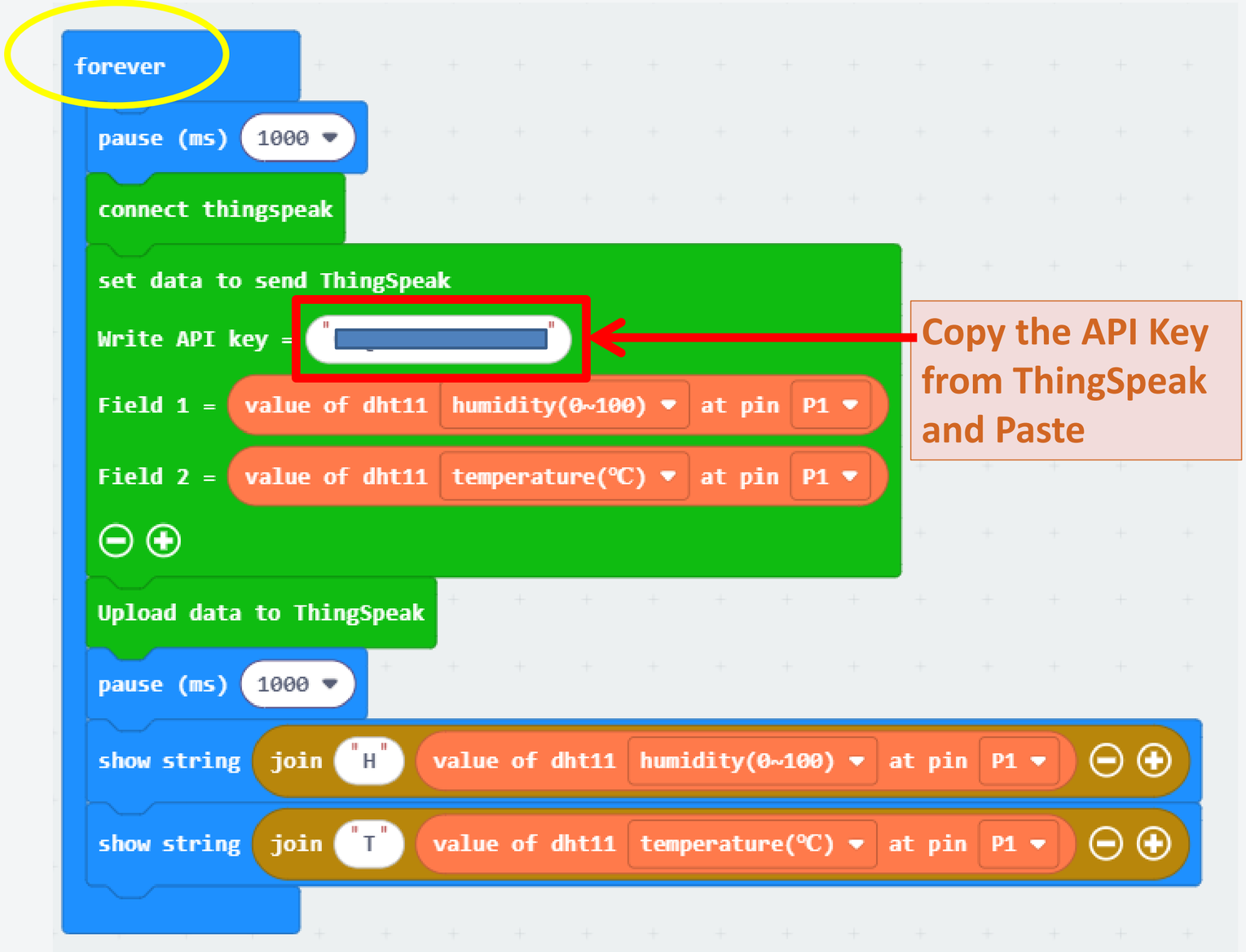
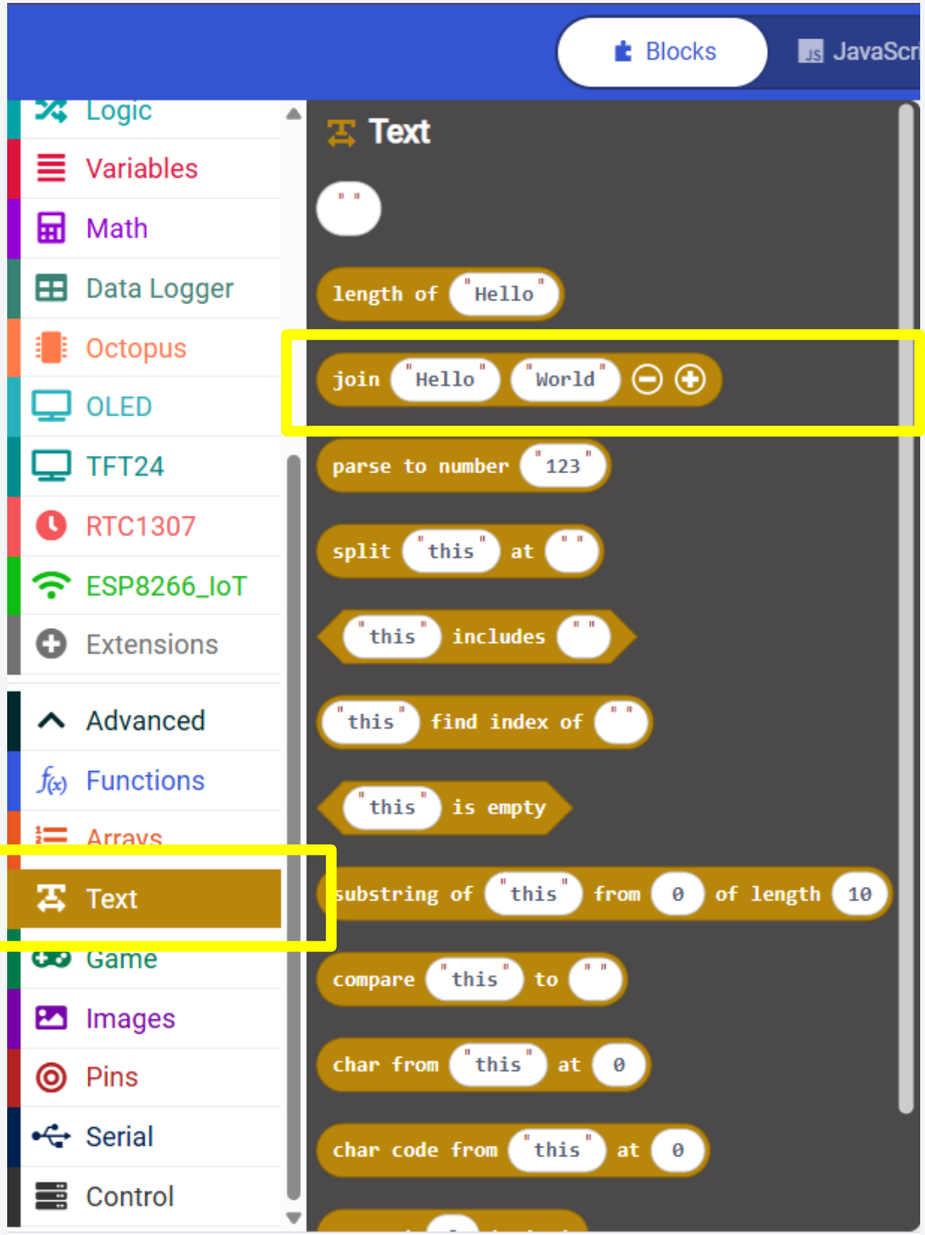




Copy the API Key from ThingSpeak and Paste


Blocks
JavaScr
Logic
Variables
Math
Data Logger
Octopus
OLED
TFT24
RTC1307
ESP8266_IoT
Extensions
Advanced
Functions
Arrays
Text
Game
Images
Pins
Serial
Control
Text
length of "Hello"
join "Hello" "World"
parse to number "123"
split "this" at ""
"this" includes ""
"this" find index of ""
"this" is empty
substring of "this" from 0 of length 10
compare "this" to ""
char from "this" at 0
char code from "this" at 0

forever
pause (ms) 1000
connect thingspeak
set data to send ThingSpeak
Write API key =
Field 1 = value of dht11 humidity(0~100) at pin P1
Field 2 = value of dht11 temperature(°C) at pin P1
Upload data to ThingSpeak
pause (ms) 1000
show string join "H" value of dht11 humidity(0~100) at pin P1
show string join "T" value of dht11 temperature(°C) at pin P1

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IoT編程

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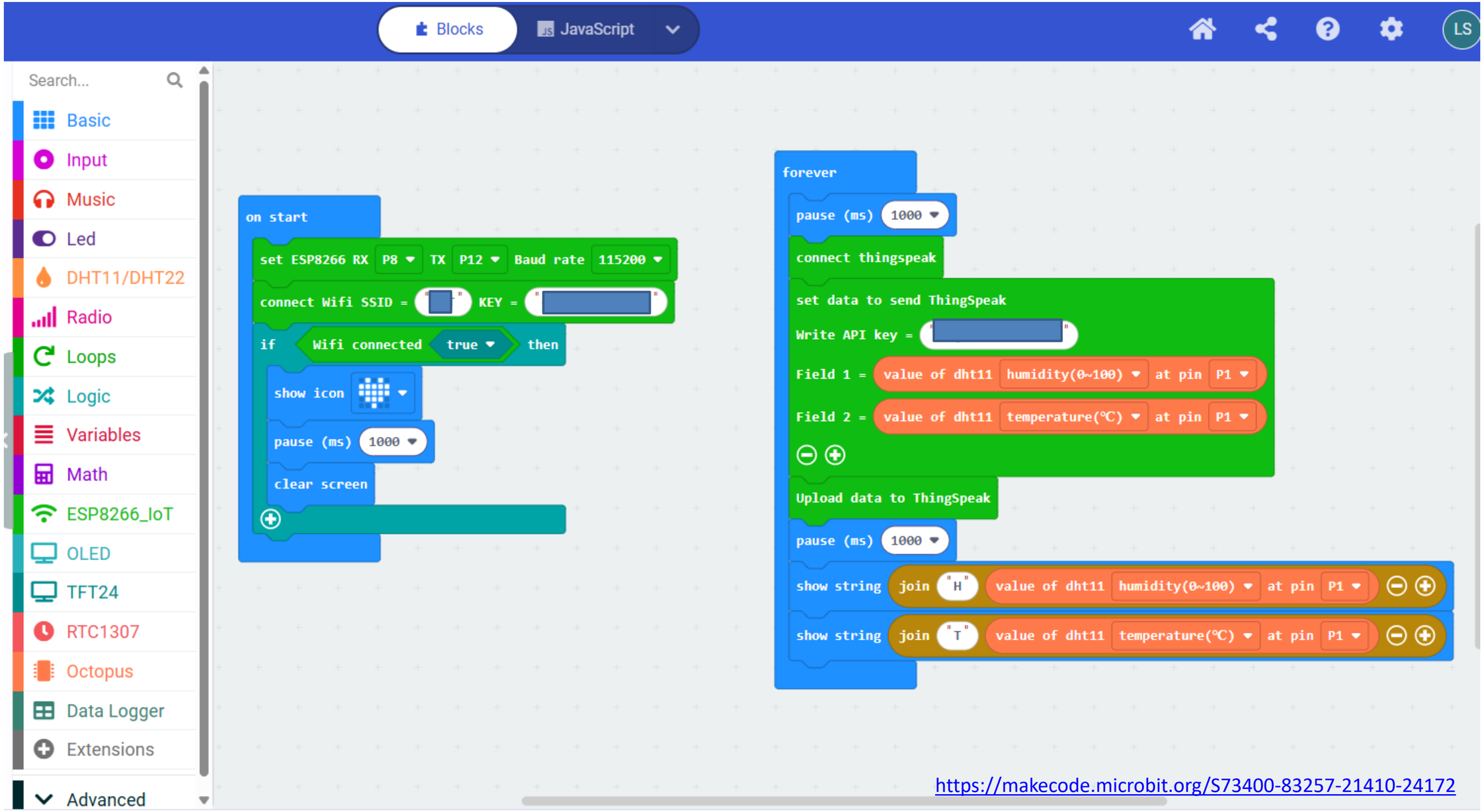
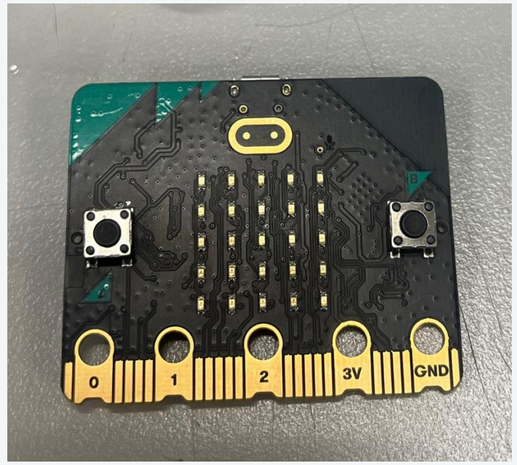
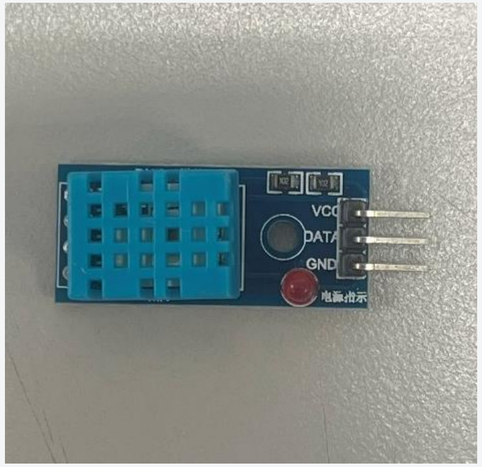


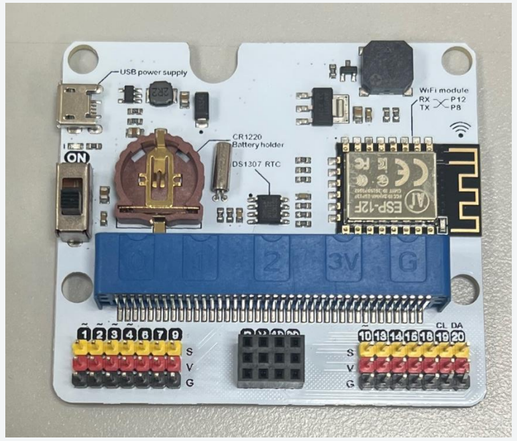
https://makecode.microbit.org/S73400-83257-21410-24172

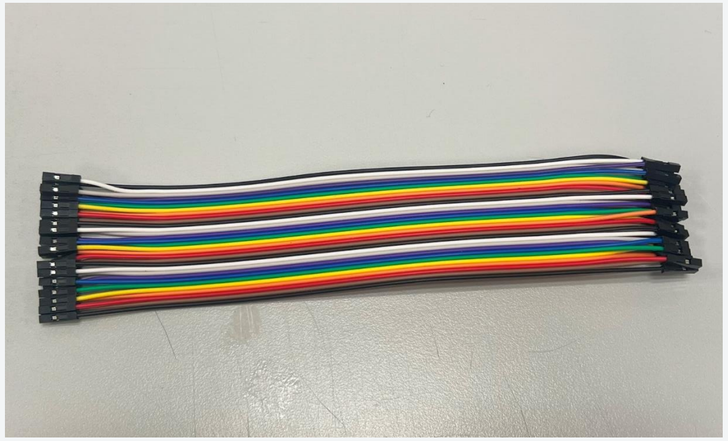
所需材料

IoT板
Micro:bit
DHT11
杜邦綫
電池
風扇
尿袋
洗臉巾
吸濕盒









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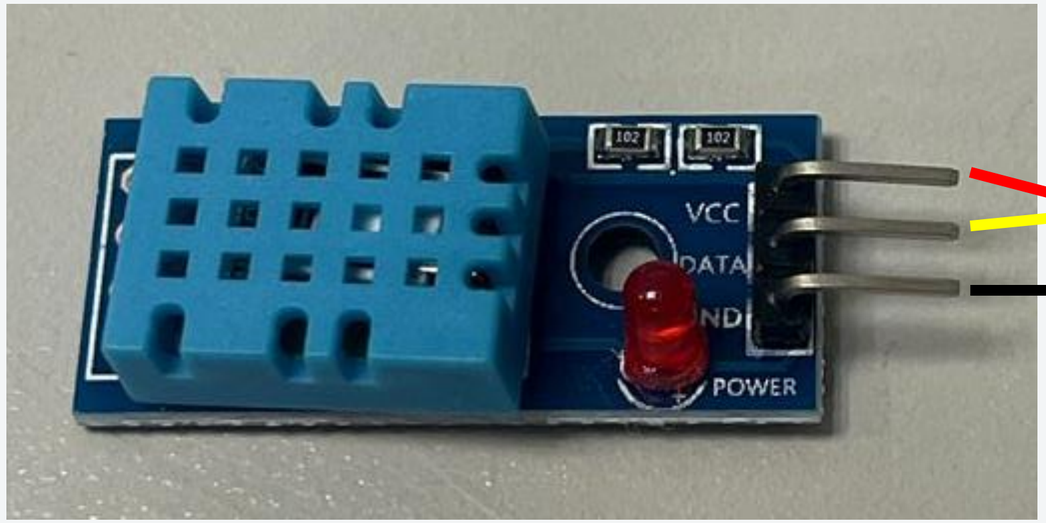
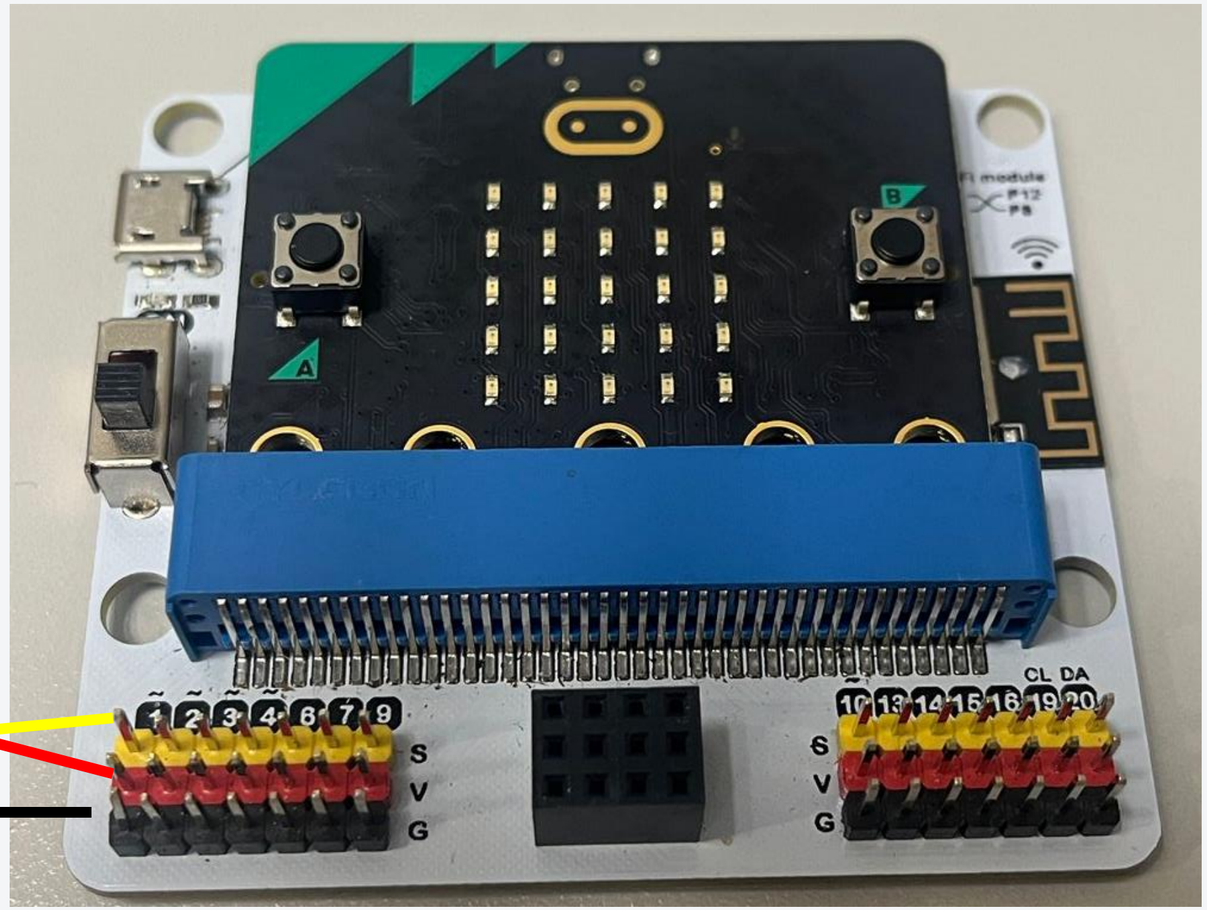
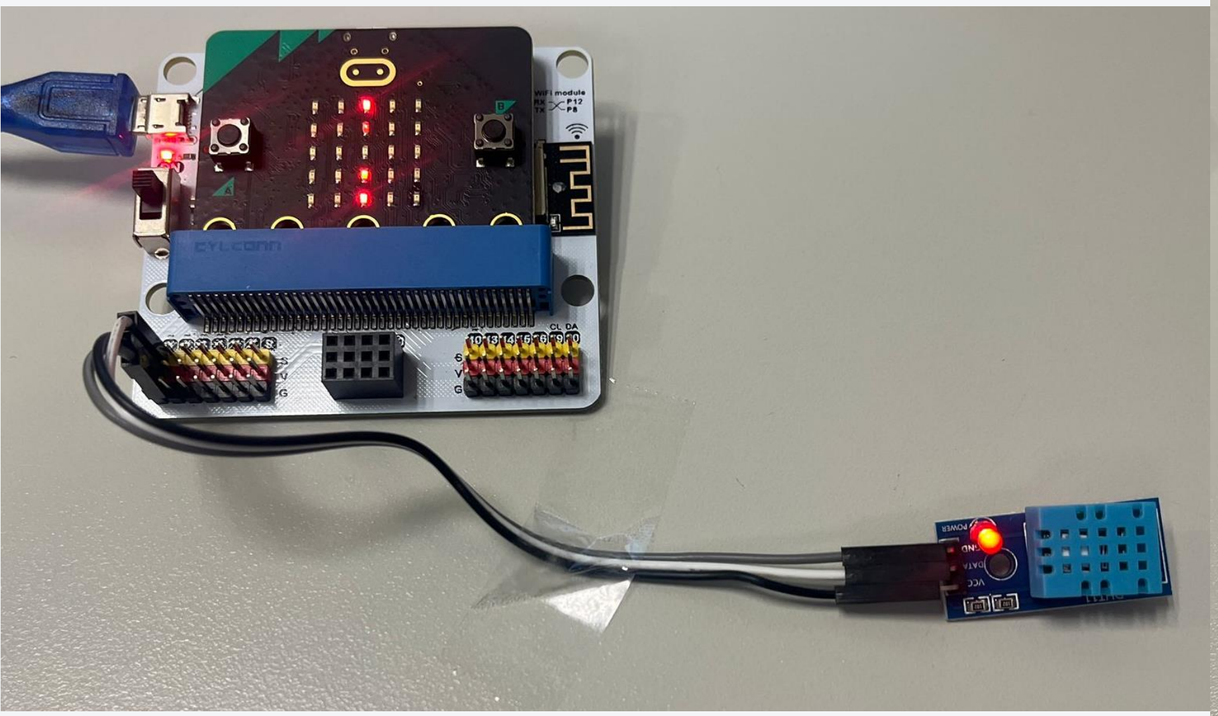
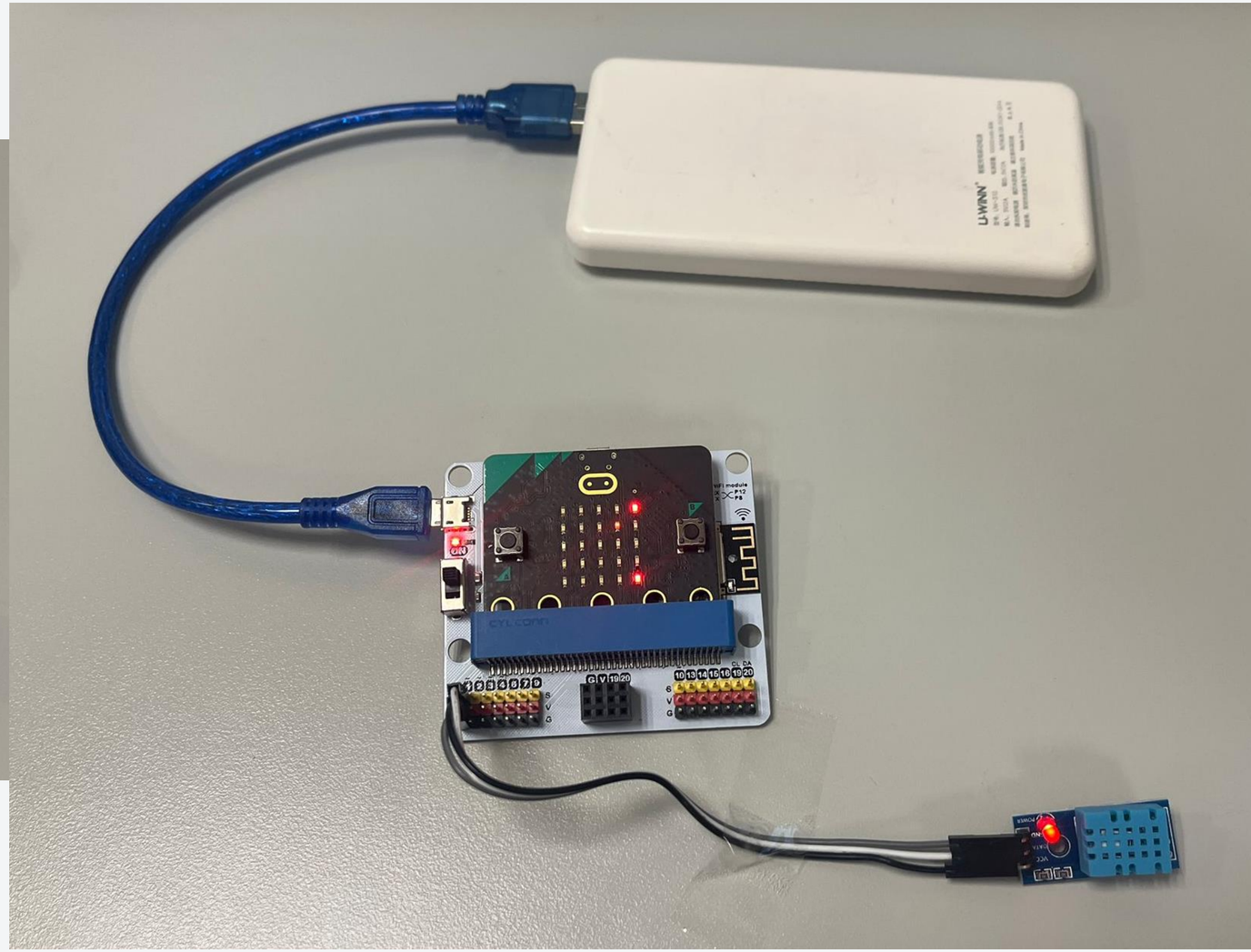
VCC to V
DATA to S
GND to G








LUWINN

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Evaluation

https://forms.gle/QSa8PszA7iZKfS5G8

https://forms.gle/X3k2aaF1AsmefGd97

IoT- Ms Olivia Liu

PDAR- Mr Tang Kuen Yan