1602 Liquid crystal display temperature

1、Achieve the goal

2、Preparation before class

3、Wiring

4、Block programming

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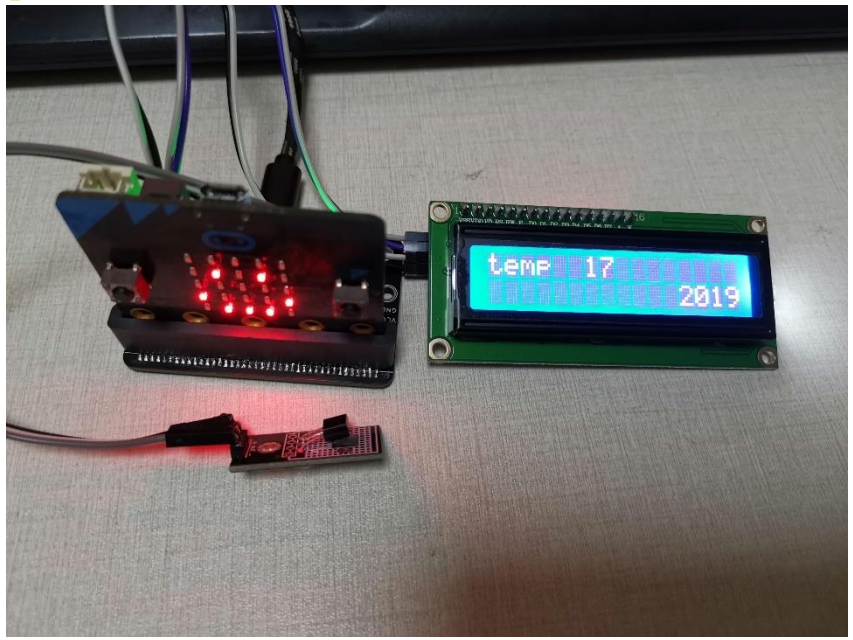

1、Achieve the goal

When the LCD module is connected to the microbit extension board, the first line of the screen displays' temp 'and real-time temperature sensor values, and the second line displays 2019.

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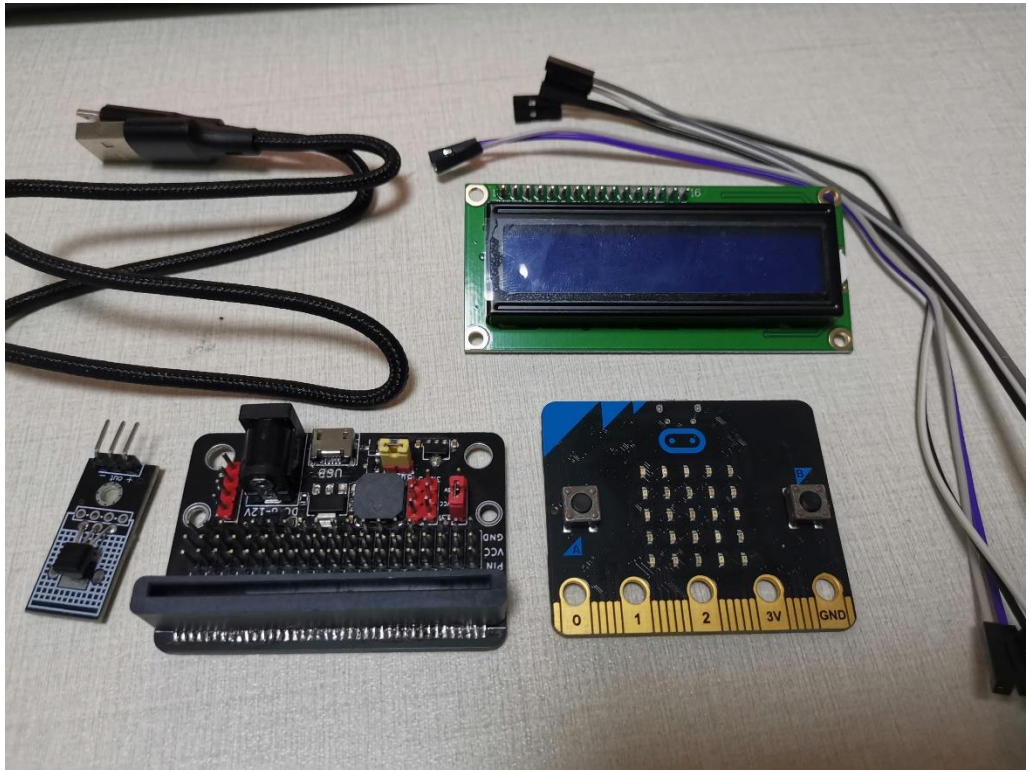

2、Preparation before class

Prepare microbit mainboard, USB cable, battery, LCD module, temperature sensor module, expansion board, dupont line.

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3、Wiring

The SDA pin of the LCD screen is connected to the SDA pin of the expansion board, the SCl pin is connected to the SCl pin of the expansion board, the VCC pin is connected to 5V, and the GND pin is connected to GND

The OUT pin of the temperature sensor is connected to the expansion plate P1, the -pin is connected to the expansion plate GND, and the + pin is connected to the VCC of the expansion plate

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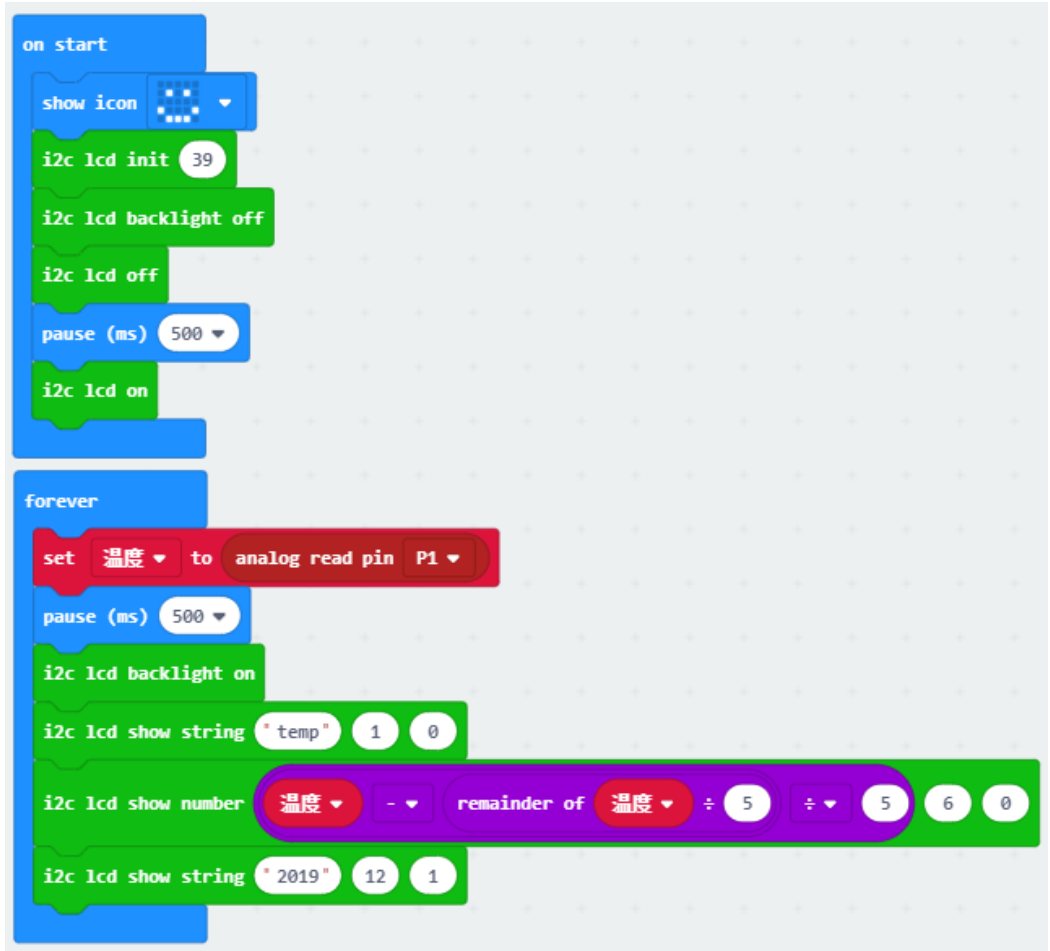
4、Block programming



1. When it is turned on, the screen displays a smile face, then the display screen I2C pin is initialized (39 refers to the I2C address), the fourth block is the rest screen, pause 500ms, open the screen, turn on the backlight, start to display 'temp' at the 2nd position of the first line, and start to display '2019' at the 13th position of the second line.
2. In the infinite loop, read the value of the temperature sensor connected to the expansion plate P1, pause for 500ms, then, and then start to display the temperature value at the seventh position in the first row

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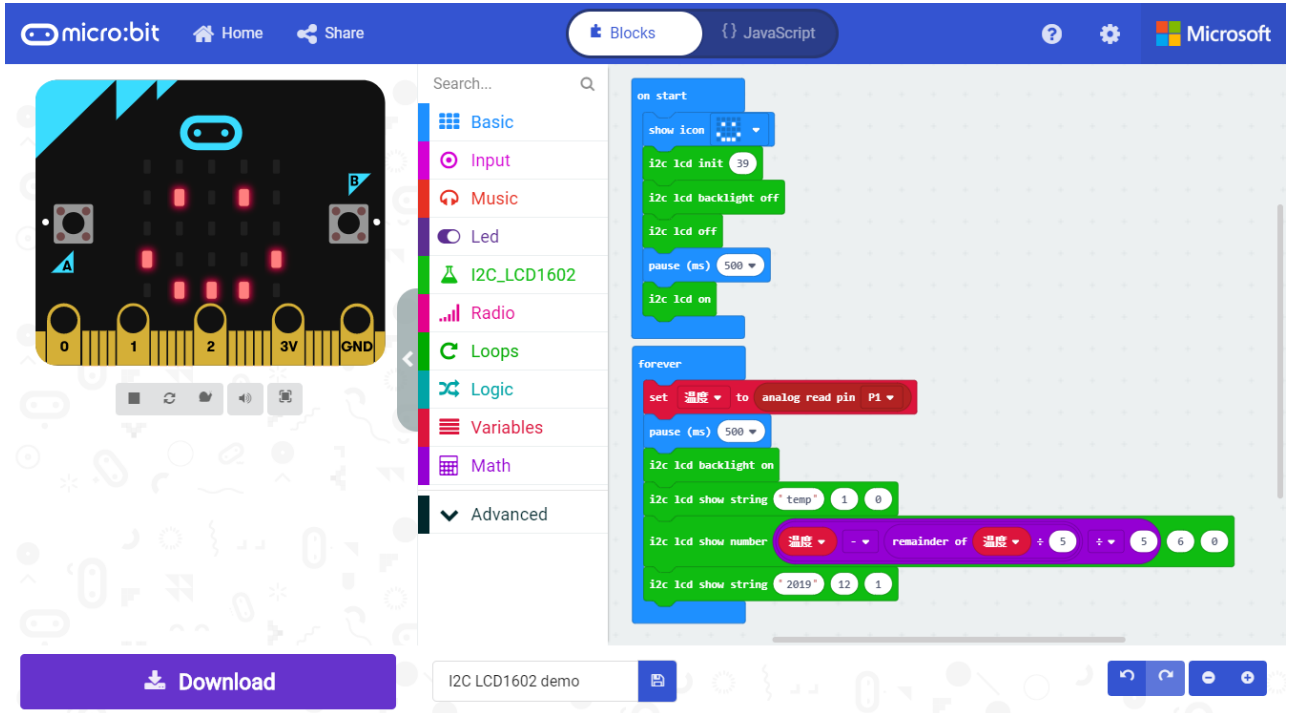

5、Download experience

1. Click "download", download the program to the microbit, connect the circuit, and you can see the result of your programming