Button control LED light to turn on and off

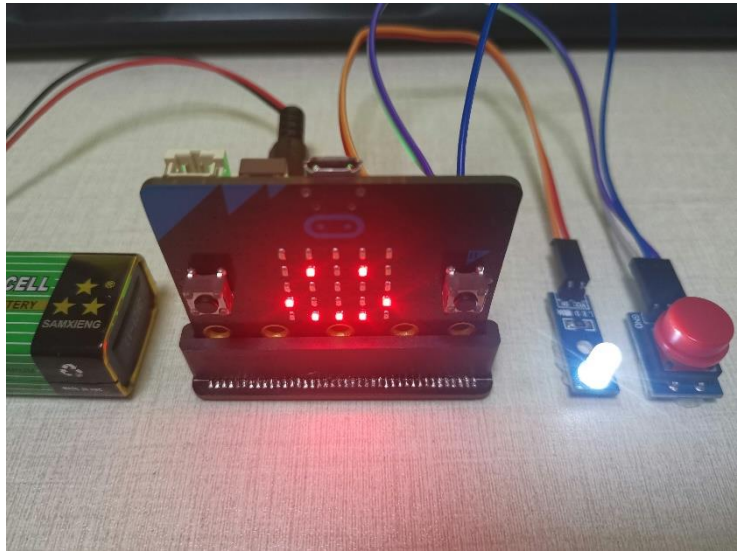
1、Achieve the goal

2、Preparation before class

3、Wiring

4、Block programming

Button control LED light to turn on and off



1、Achieve the goal

When the button module is pressed, the LED lamp module goes out

When the button module is released, the LED lamp module lights up

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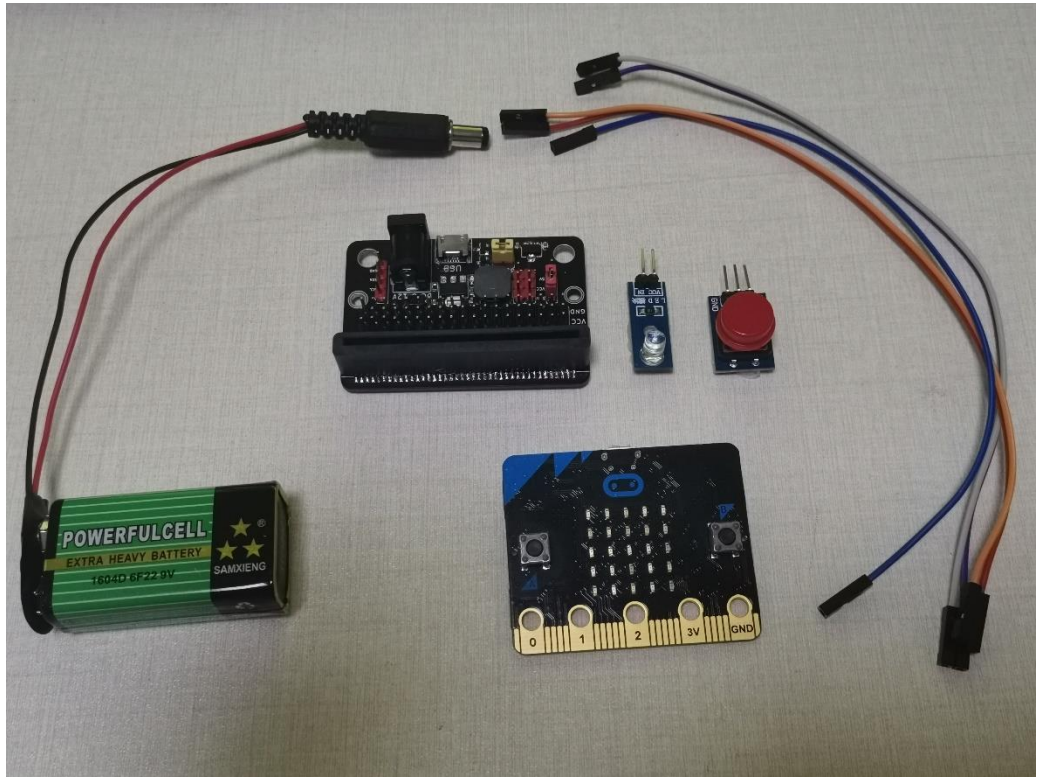

2、Preparation before class

Prepare microbit motherboard, USB cable, battery, LED lamp module, button module, dupont line, expansion board.

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3、Wiring

The VCC of the button module and LED lamp module is connected to the VCC of the extension board.

The IN pin of the LED lamp module is connected to the expansion plate P2; GND of the button module is connected to GND of the extension board, and OUT is connected to P1 of the extension board

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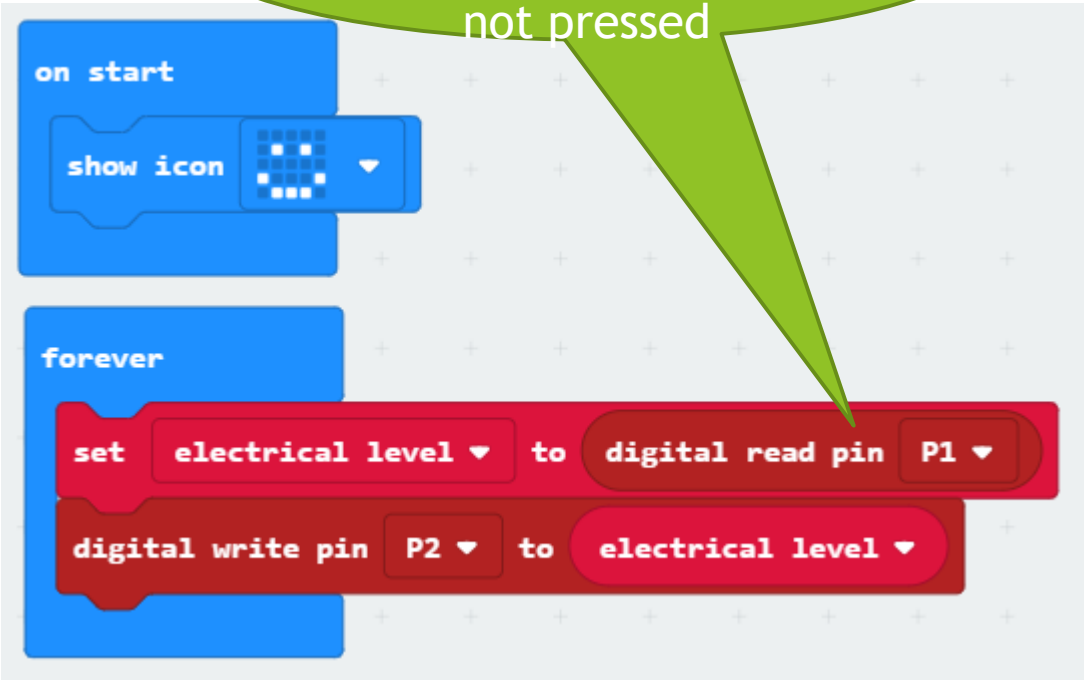
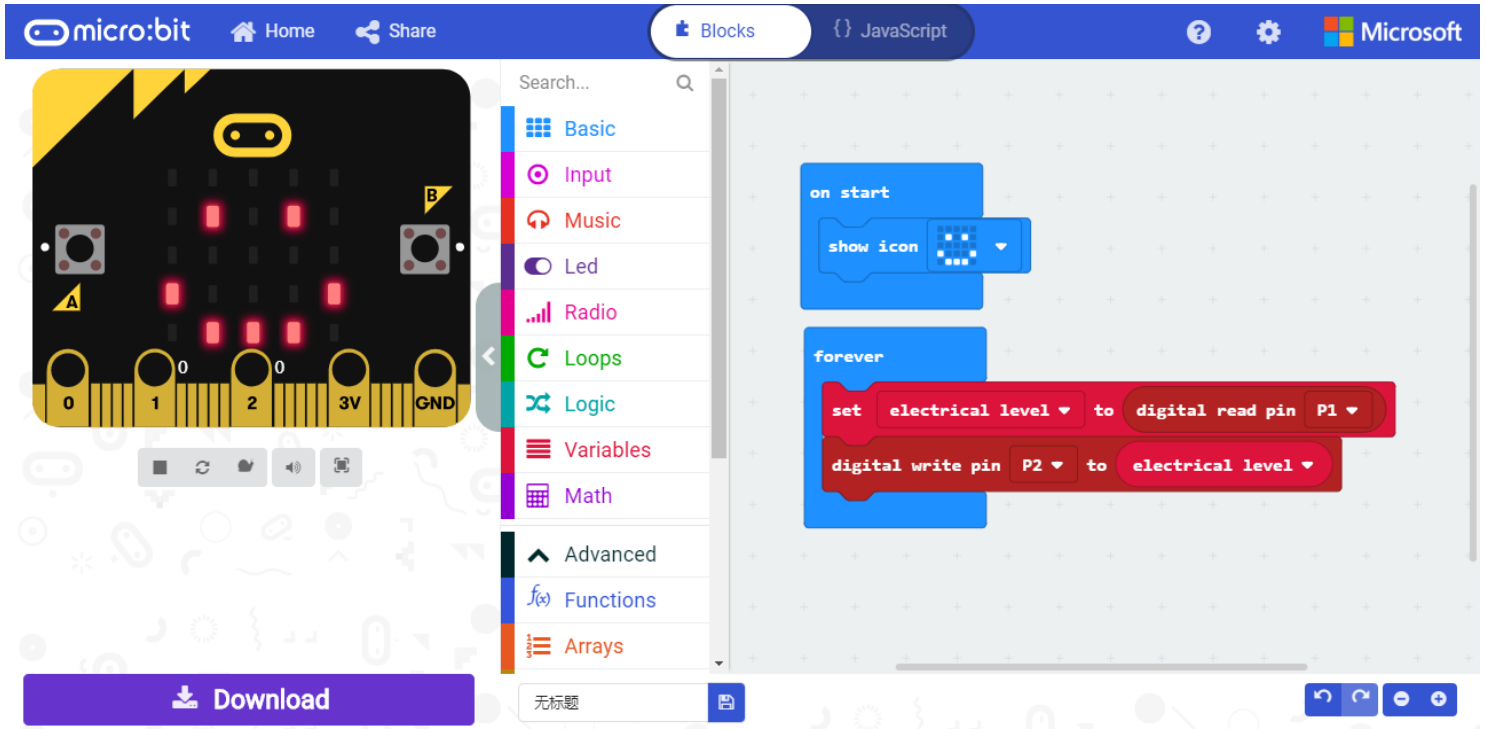
When the button is pressed, its out pin value becomes 1, or 0 if it is not pressed



4、Block programming

1. When the it is turned on, the microbit screen displays an icon of a smiley face and then enters the wireless loop
2. In the wireless loop, the first program block is to read the button state 0 or 1 connected to the P1 pin, assign the value to the variable, and then write the value of the variable to pin P2, so that the LED can be controlled by the button state

Button control LED light to turn on and off



5、Download experience

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