Smart home lighting remote control

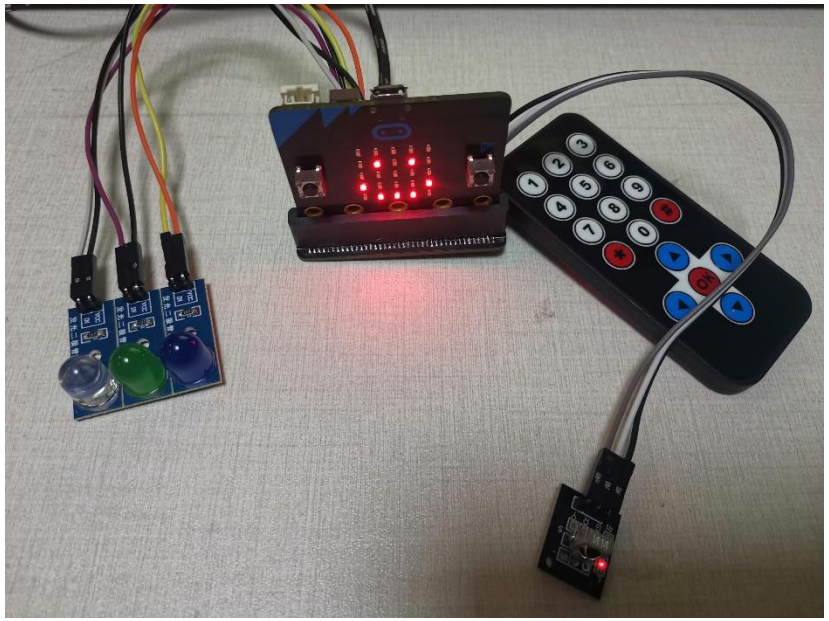
1、Achieve the goal

2、Preparation before class

3、Wiring

4、Block programming

Smart home lighting remote control



1、Achieve the goal

When the remote control buttons 1, 2 and 3 are pressed, the corresponding LED light will be on or off, and the screen will display the corresponding icon; When button 0 is pressed, all lights go out; Press the button OK and all lights are on.

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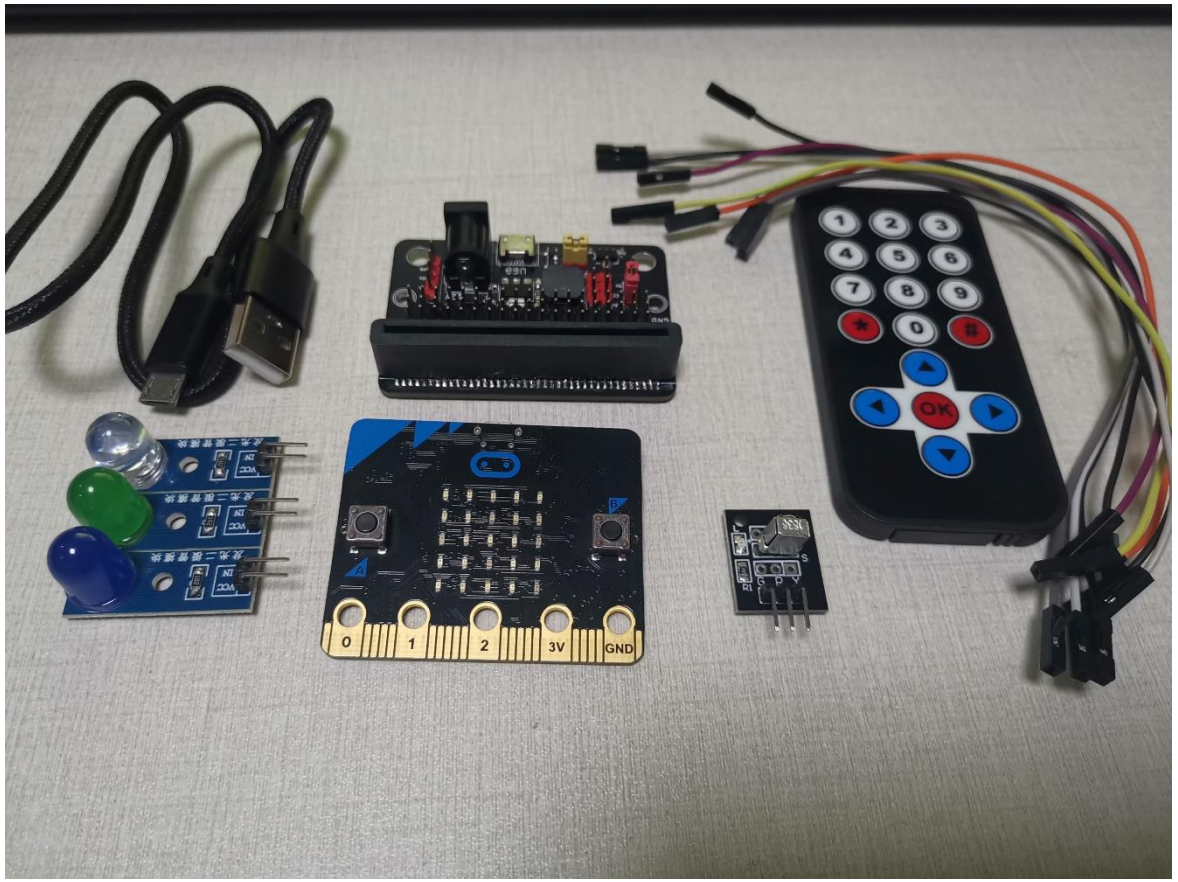

2、课前准备

Prepare microbit mainboard, USB cable, battery, infrared receiver module, infrared remote control, LED lamp module, expansion board, dupont line.

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3、Wiring

The G pin of the infrared receiver is connected to the GND of the extension plate, the R pin is connected to the VCC of the extension plate, and the Y pin is connected to the P11 pin of the extension plate

The IN pin of the LED lamp module is connected to P12, P13 and P14 respectively, and the VCC is connected to the VCC pin of the extension board

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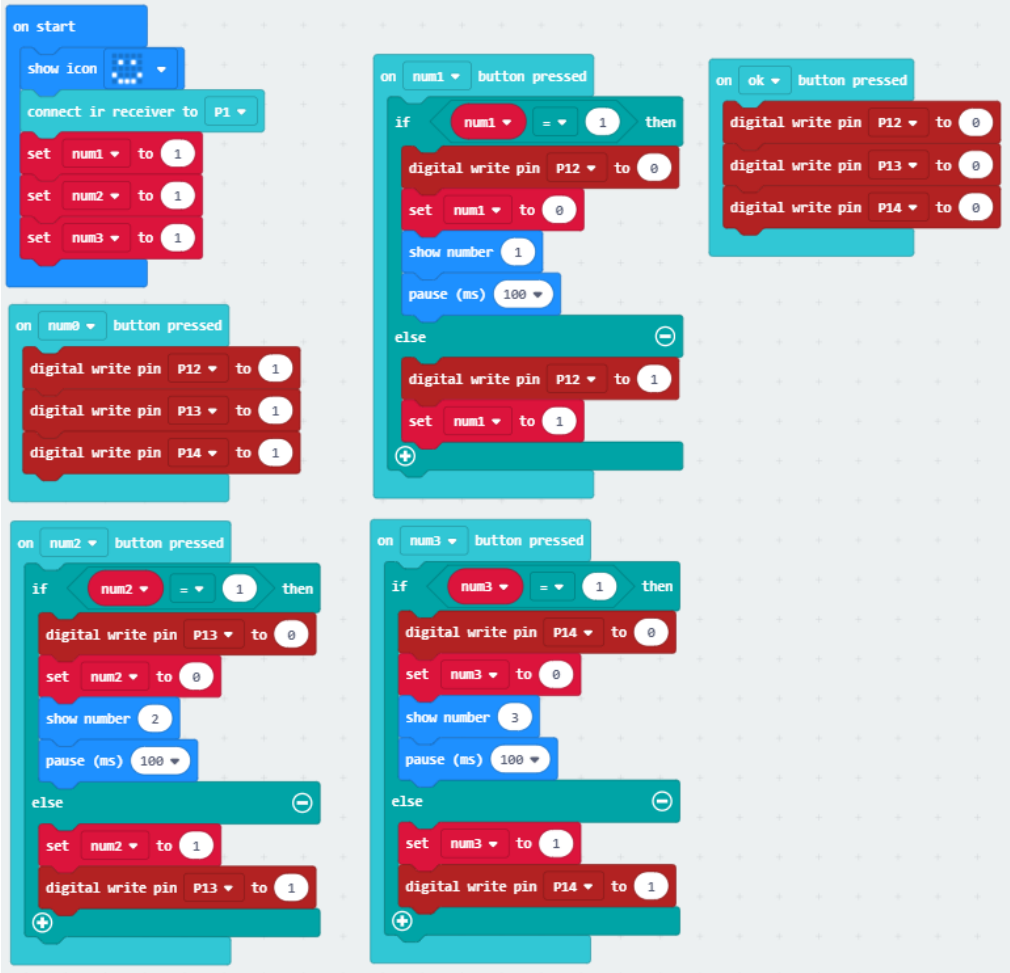
4、Block programming



1. When starting up, initialize the infrared
Receive the header and select the corresponding pin
2. When the buttons num1, num2 and num3 are pressed respectively, the screen will display corresponding Numbers and the corresponding LED lights will be turned on or off. Turn off all lights when num0 is pressed;
When the button OK is pressed, all lights are turned on, and note the use of program block markers with red color in the program

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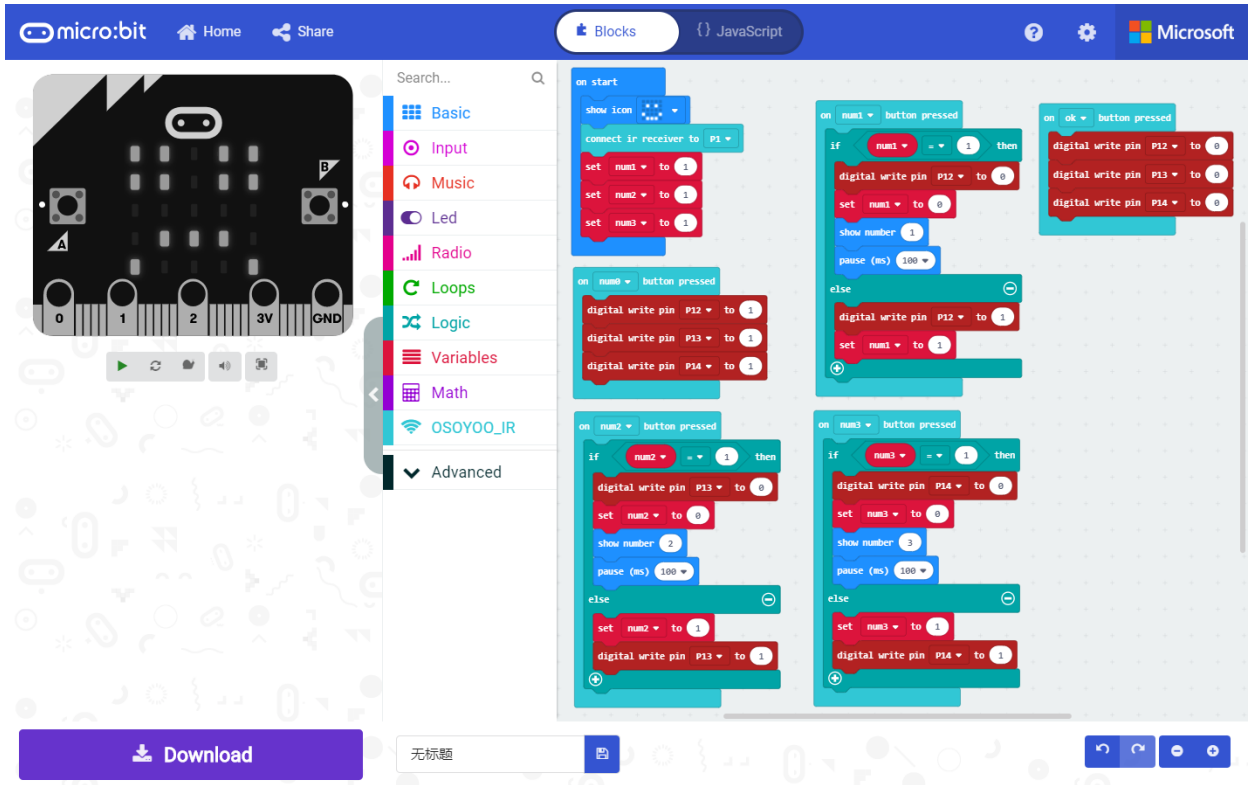

5、Download experience

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