Section 9. Magicbit controls RGB ultrasonic

1、 Achieve the goal

2、 Preparation before class

3、 Block programming

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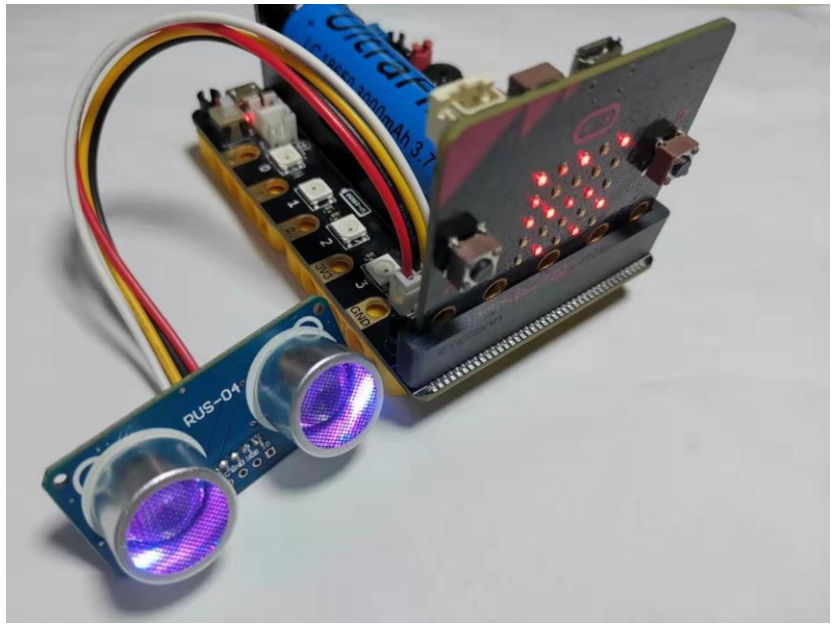

1、Achieve the goal

Write a program to measure the distance of obstacles ahead, display them on the screen, and make the ultrasonic RGB lamp show indigo, with special effects as the breathing lamp, through the RGB ultrasonic interface of the Magicbit extension

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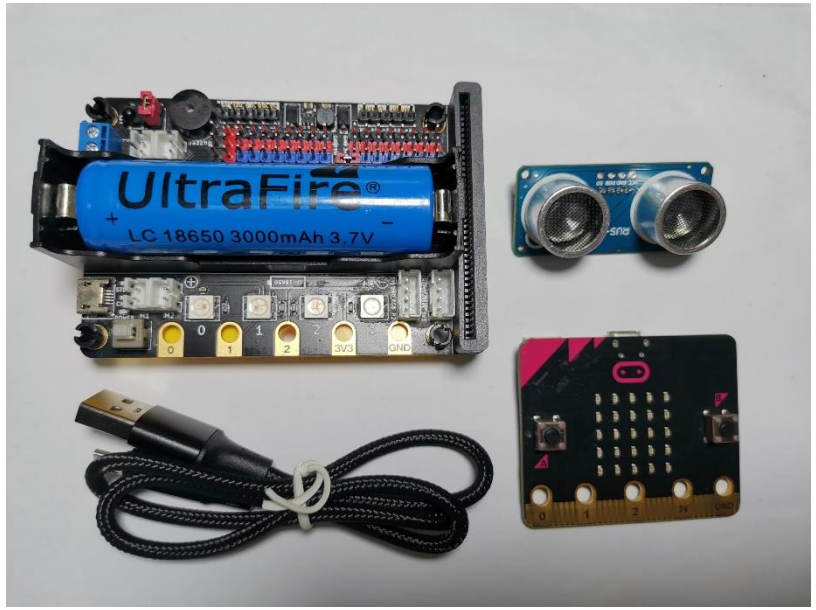

2、Preparation before class

Prepare a microbit motherboard, a USB cable, a Magicbit extension, an RGB ultrasonic module, and a computer

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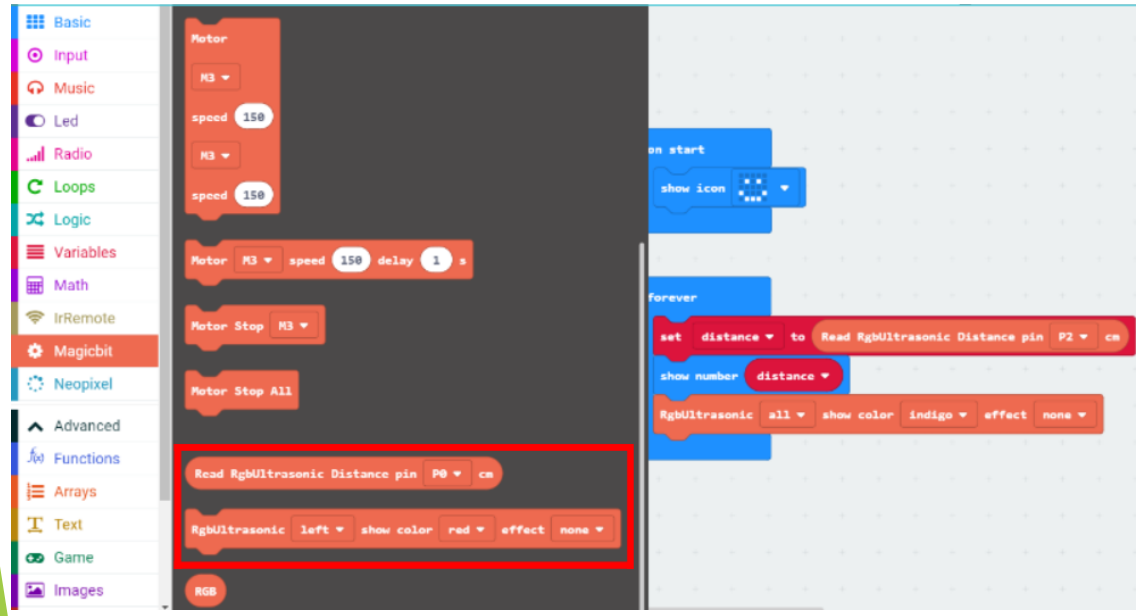
3、Block programming



1, in Magicbit bag, containing the RGB control ultrasonic program blocks, the number 2 to set the ultrasonic pin, select the P2, serial number 3 for the control of ultrasonic RGB light, the first white triangle symbol which one is to choose the control RGB light, the second is to choose the display color, and the third is to choose the special effects, breathing lamp, rotating meteors flash shuo, three kinds of special effects

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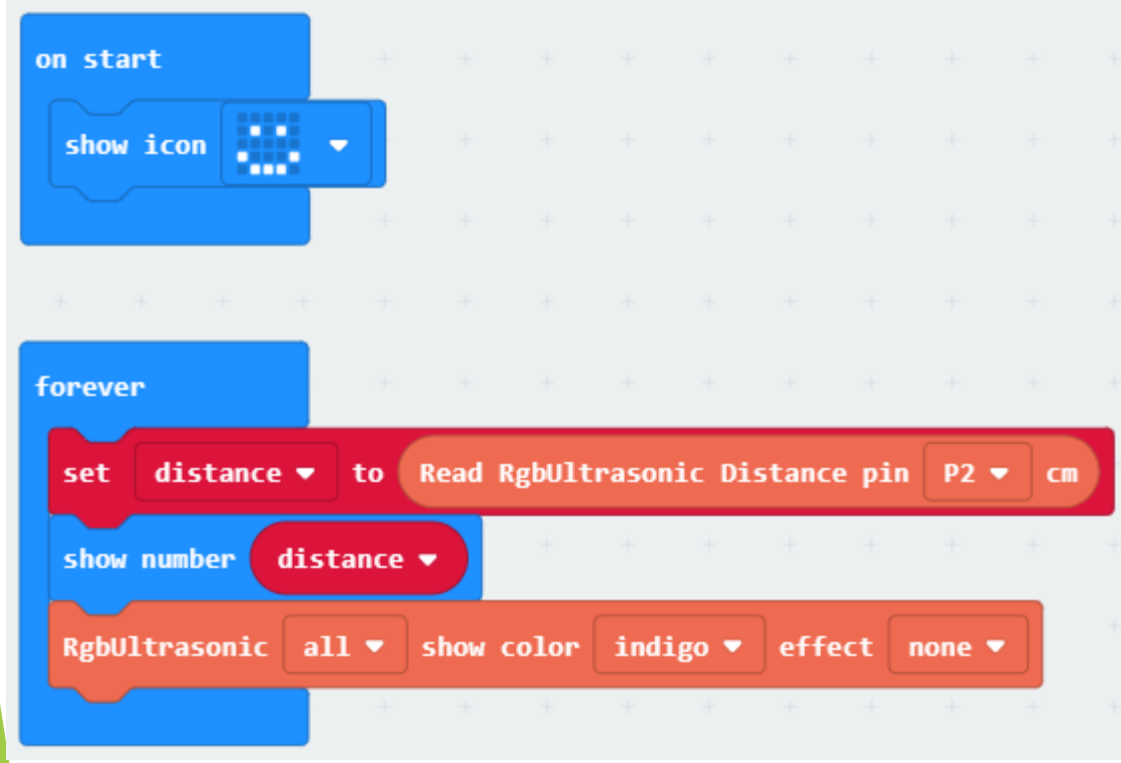
3、Block programming



2. When the machine is turned on, a smiling face is displayed on the screen. In the infinite loop, the first program block assigns the ultrasonic detection distance read by pin P2 to the variable distance, the second program block displays the distance on the screen, and the third program block sets the ultrasonic RGB lamp to control all, display indigo and breathing lamp effects

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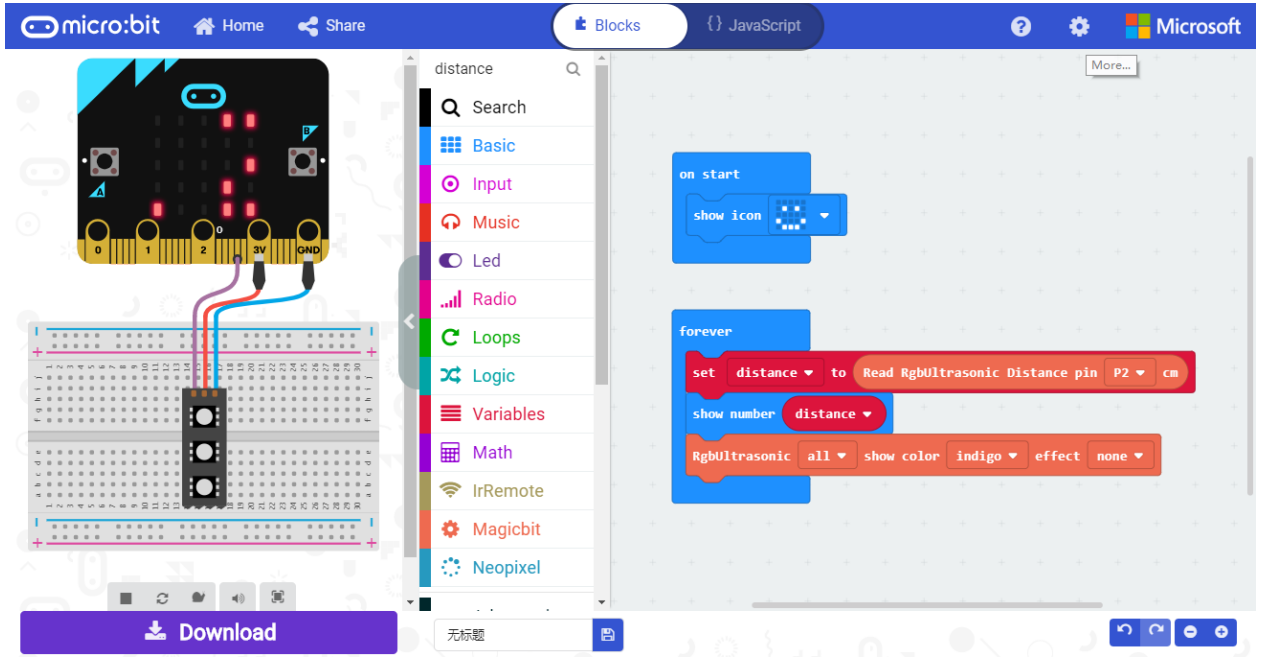

下载体验

1、点击“下载”，把程序下载到microbit，就能看到自己编程的结果了

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Did your program work ???

What else can ultrasonic RGB lamp do?? Use your creativity and give it a try!