The relay control the motor rotation

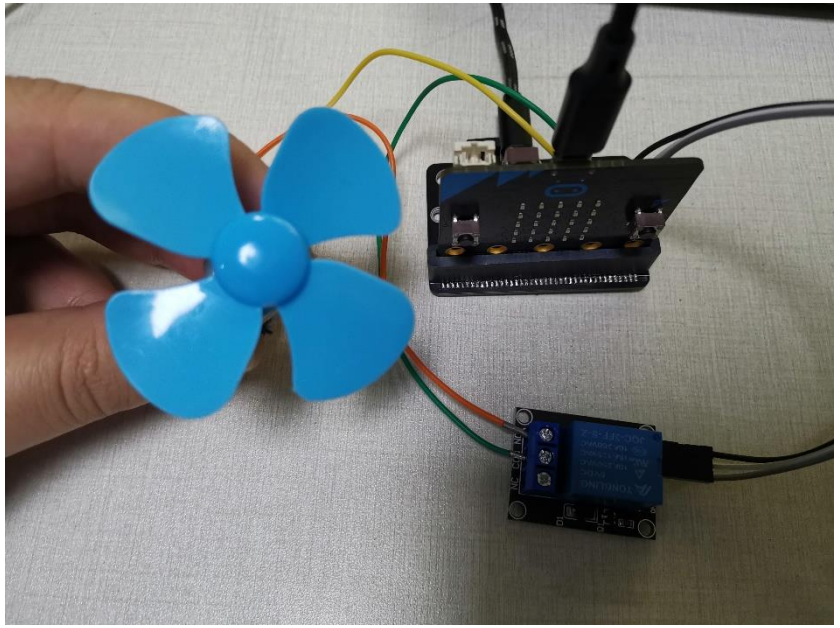
1、Achieve the goal

2、Preparation before class

3、Wiring

4、Block programming

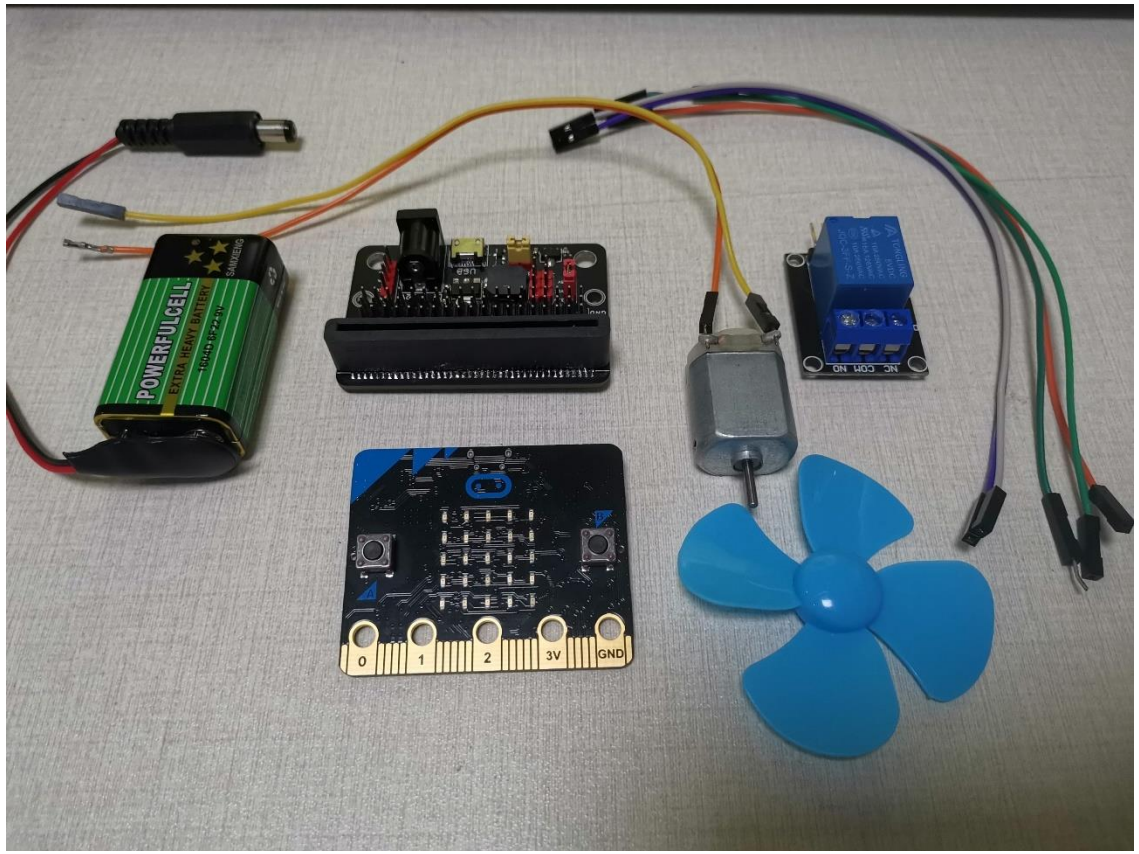
The relay control the motor rotation



1、Achieve the goal

When the circuit is connected, the relay will be opened and closed at 5S intervals. Meanwhile, the relay, as a switch, will also control the rotation or stop of the motor at 5S intervals (when using the motor, be careful not to allow the motor to rotate for too long, otherwise it will get hot and burn out).

The relay control the motor rotation



2、Preparation before class

Prepare microbit mainboard, USB cable, battery, motor module, relay module, expansion board, dupont line。

The relay control the motor rotation

3、Wiring

Relay S pin connected with extension plate P2, + pin connected with extension plate VCC, -pin connected with extension plate GND, NO pin connected with VCC;

The motor module connects the COM pin of the relay by one wire and the GND pin of the extension plate by another wire

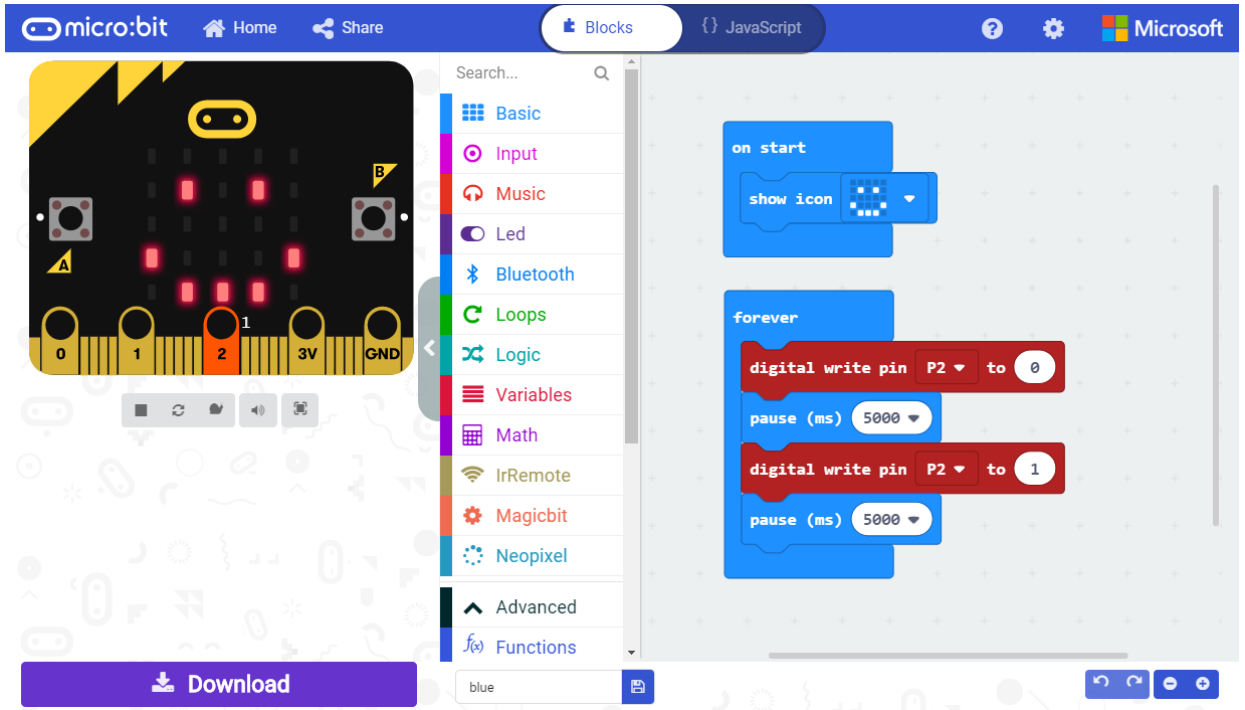
Dual power supply, using usb to power the microbit on one hand, and a battery or another usb cable to power the extension board on the other

The relay control the motor rotation

4、Block programming

1. When the machine is turned on, the microbit screen displays a pattern of a smiley face and then enters an infinite loop
2. In the infinite loop, the first program block is to set the expansion board P2 pin to low level 0 and suspend 5s, and then set it to high level 1 and suspend 5s, so that the relay will open and close 5s apart. Thus control the motor interval 5S rotation and stop

The relay control the motor rotation



5、Download experience

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