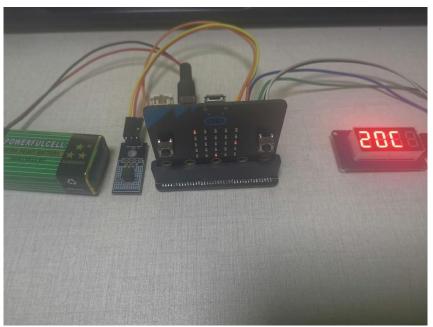


- 1. Achieve the goal
 - 2. Preparation before class
- 3. Wiring
- 4. Block programming

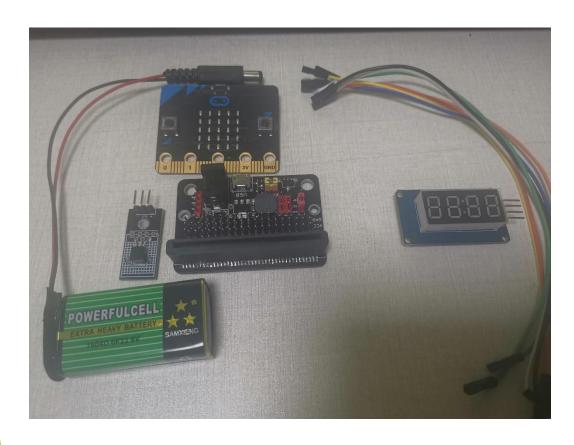




1. Achieve the goal

The digital tube displays the temperature value detected by the temperature sensor. When the detected temperature changes, the digital tube display data will also change at any time





2. Preparation before class

Prepare microbit mainboard, USB cable, battery, digital tube module, extension version, temperature sensor module, dupont line.



3. Wiring

The out pins of the temperature sensor are connected to the P3 pins connected to the extended version, and the + and - pins are connected to the VCC and GND pins respectively

The VCC and GND pins of the digital tube are connected to the VCC and GND pins of the extended edition, while the CLK and DIO are connected to the P1 and P2 pins of the expansion plate, respectively

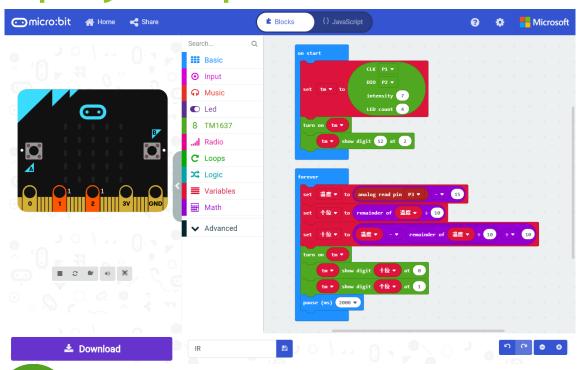


```
on start
                 CLK P1 ▼
                 DIO P2 ▼
                LED count 4
     tm ▼ show digit 12 at 2
 set 个位 ▼ to remainder of 温度 ▼ ÷ 10
   十位 ▼ to 温度 ▼ - ▼ remainder of 温度 ▼ ÷ 10
 turn on tm
     tm ▼ show digit 十位 ▼ at 0
     tm ▼ show digit 个位 ▼ at 1
pause (ms) 2000 ▼
```

4. Block programming

1. When starting up, first initialize the digital tube, then open the digital tube, and let the third digital tube display the temperature symbol C 2. In the infinite loop, first process the value of the temperature sensor connected to the P3 pin and pass it to the variable, then calculate the value of the tens place and the ones place through mathematics, and display it in the first and second digital tube respectively





5. Download experience

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