

Change_expression

1.Learning goal

In this course, we mainly use the alligator clip and tin foil to form a conductive circuit. The human body touches the tin foil to simulate that the P2 pin is pressed, and then controls the LED: bit to display different expression while changing the color of the RGB lights of the Basic:bit.

2.Programming method

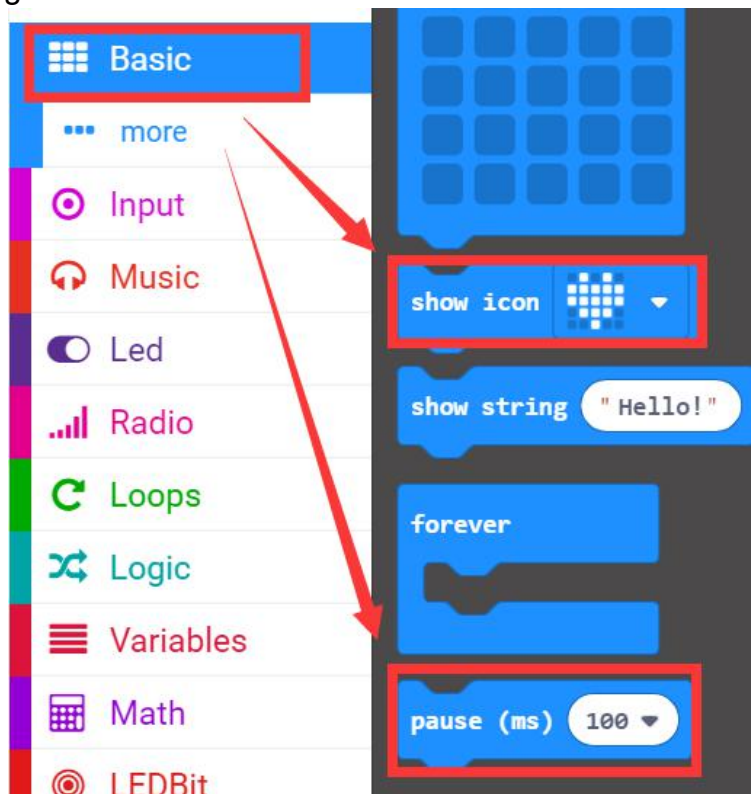
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: <http://microbit.org/> to enter the programming interface. Add the Yahboom package <https://github.com/lzty634158/LED-Bit> to program.

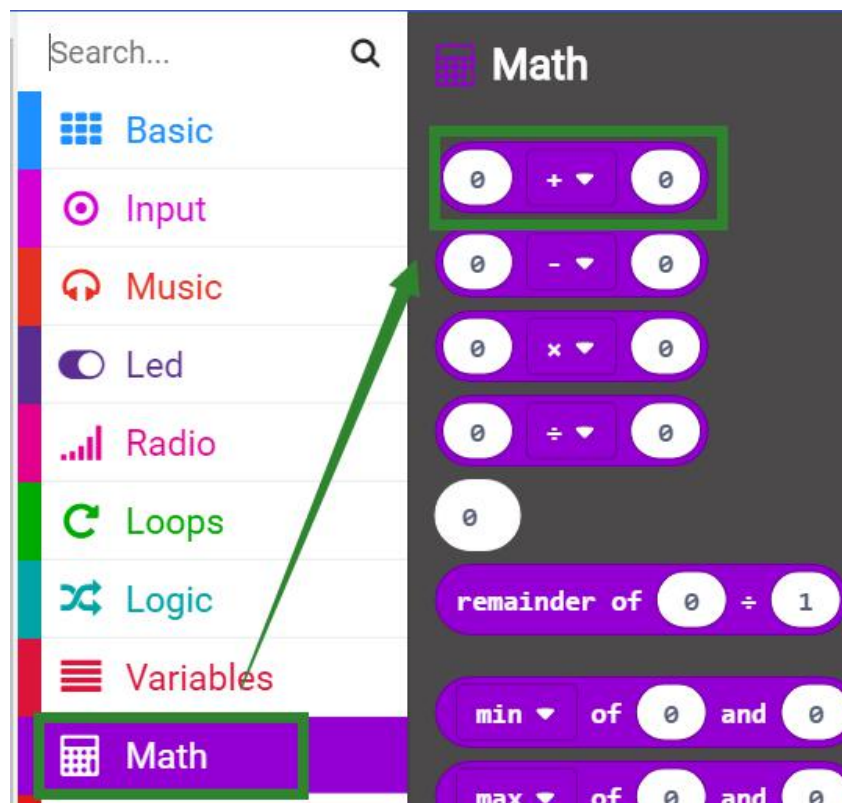
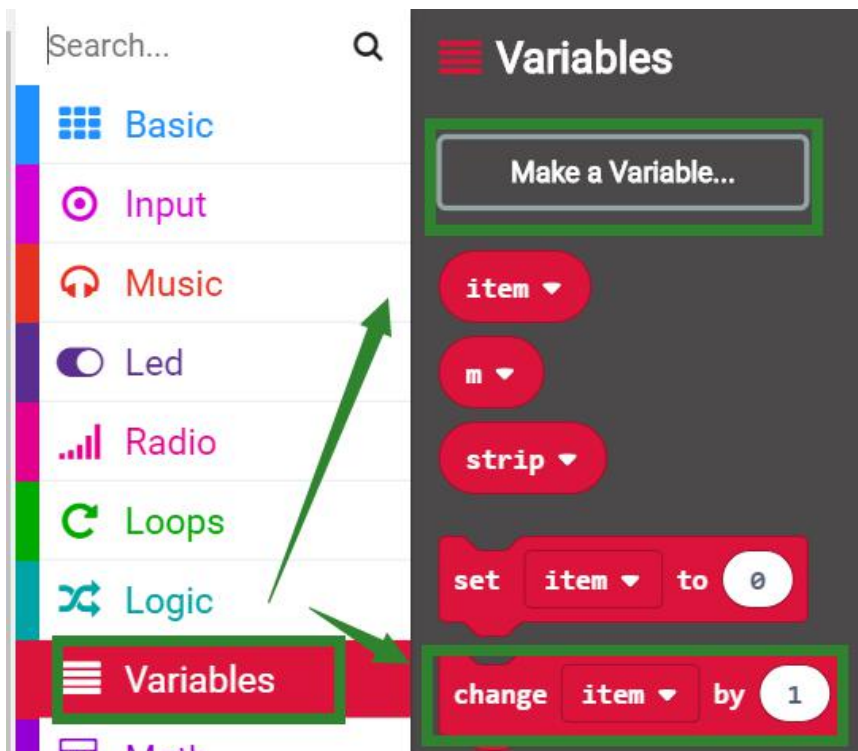
Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click 【New Project】 , add Yahboom package:

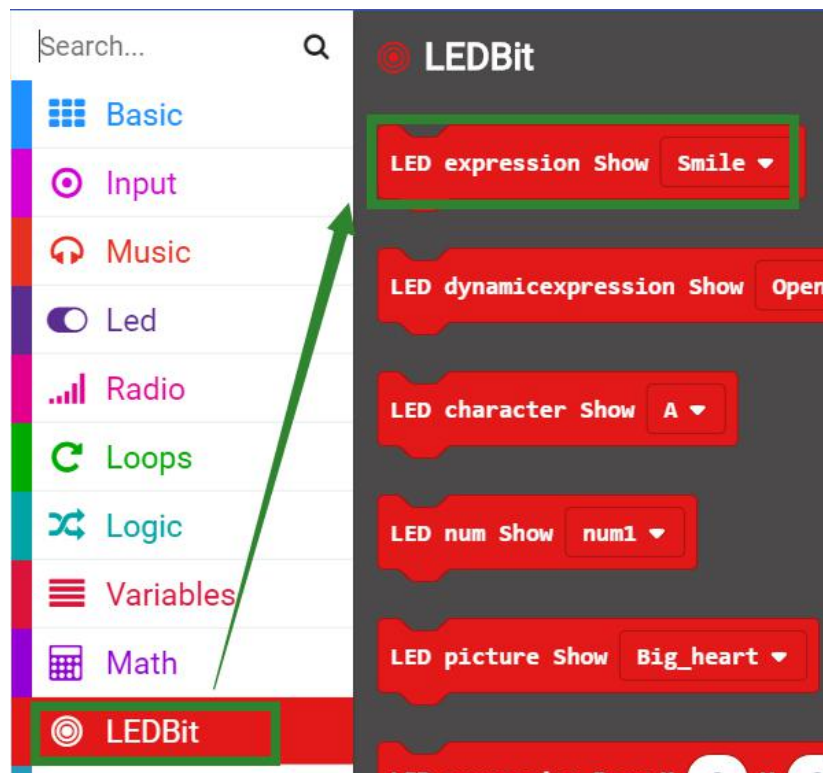
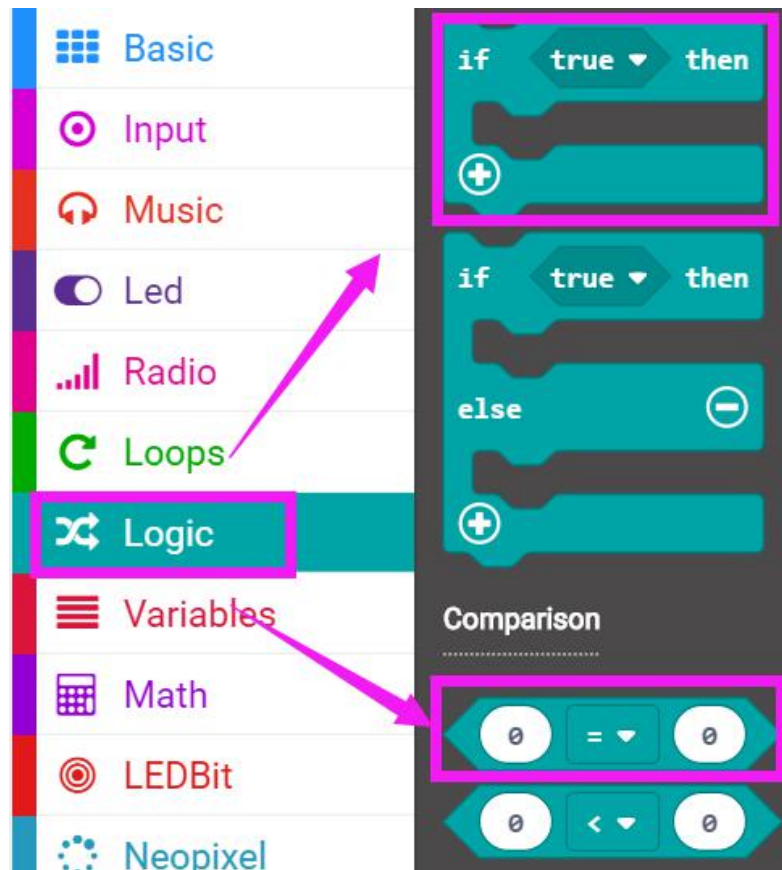
<https://github.com/lzty634158/LED-Bit>, you can program.

3.Looking for blocks

The following is the location of the building blocks required for this programming.



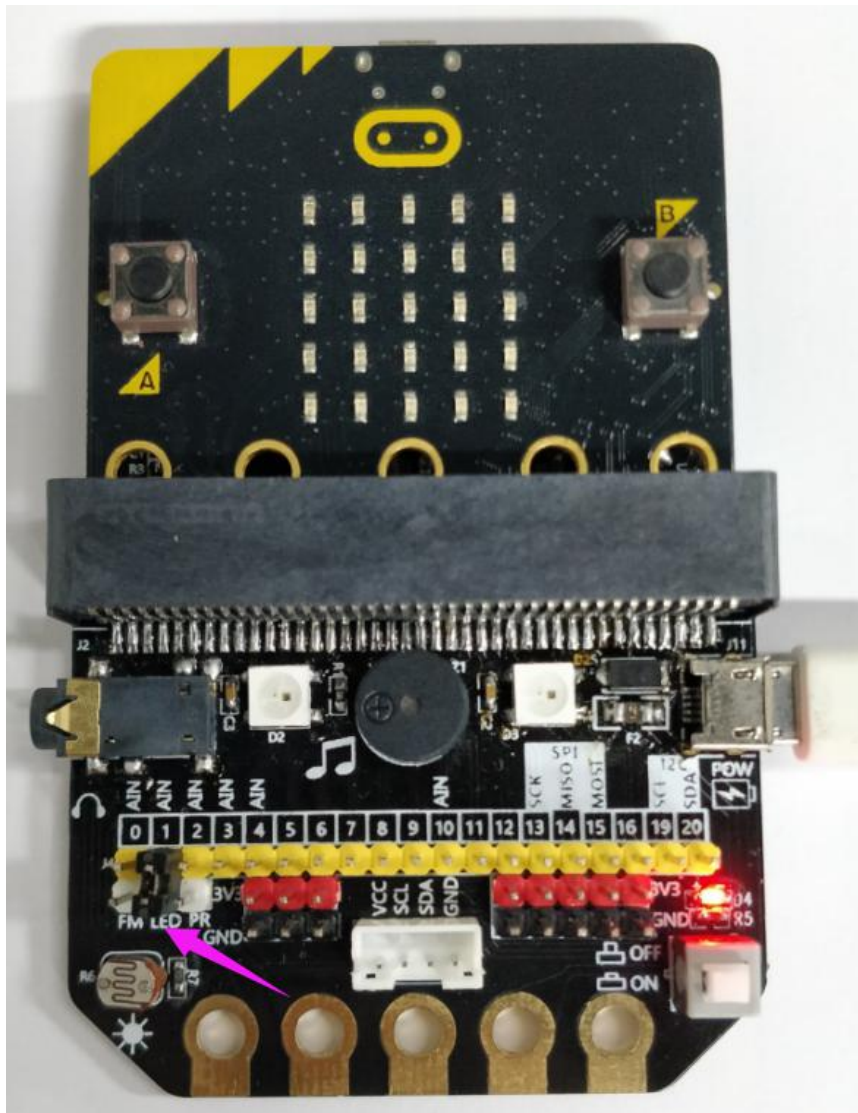




4.Combine building block

The summary program is shown below:

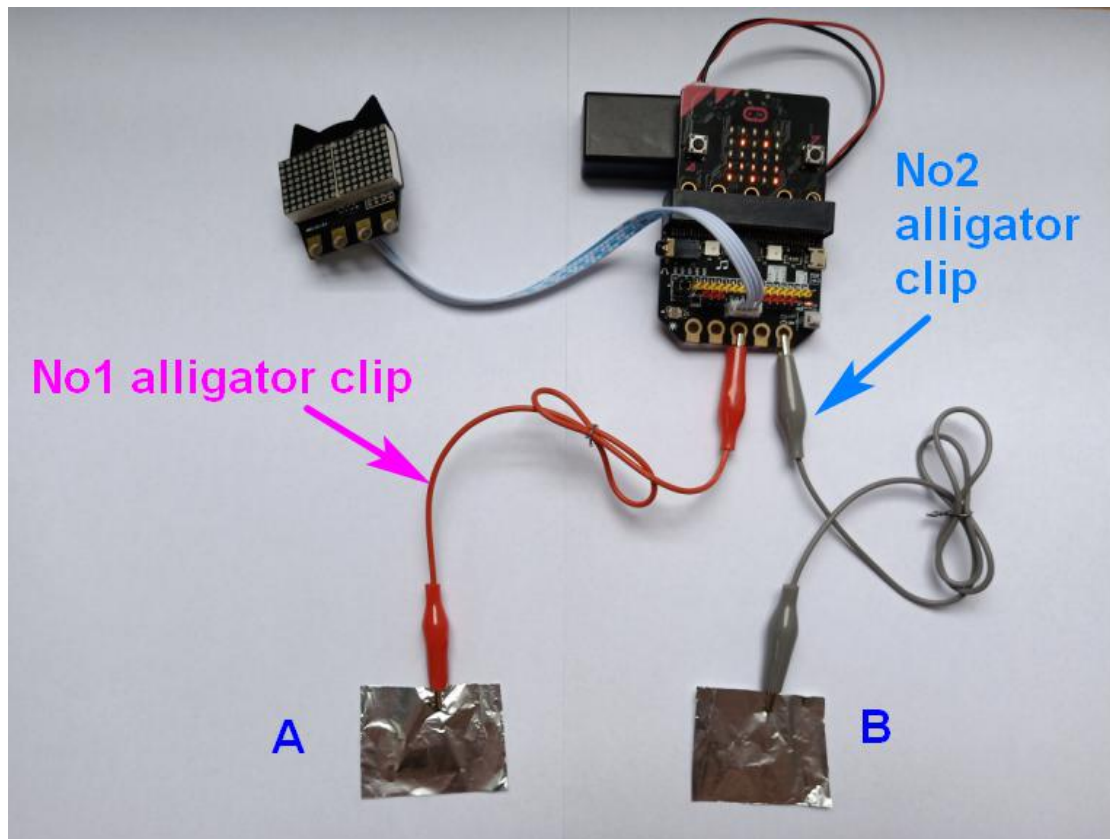
Note: The jumper cap needs to be connected to the P1 and LED pins on the Basic:bit expansion board. The jumper cap needs to be removed to the P2 and PR pins on the Basic:bit expansion board. As shown below.



One end of the No1 alligator clip is connected to the P2 of the Basic:bit expansion board, and the other end is connected to the A tin foil.

One end of the No2 alligator clip is connected to the GND port of the Basic:bit expansion board, and the other end is connected to the B tin foil.

As shown in the following figure.



5. Experimental phenomena

After the program is successfully downloaded, when you touch the tin foil with two fingers, different expressions will be displayed on the LED:bit, and the two RGB lights on the Basic:bit expansion board will also change different colors.

