

Beckon-robot

1.Learning goals

In this lesson, we mainly learn how to use the input building block to make the micro:bit read whether the P2 pin is touched and control the servo.

When the P2 and GND of the micro:bit basic expansion board are touched at the same time, the fixed "small hand" of the servo will swing and wave.

2.Programming method:

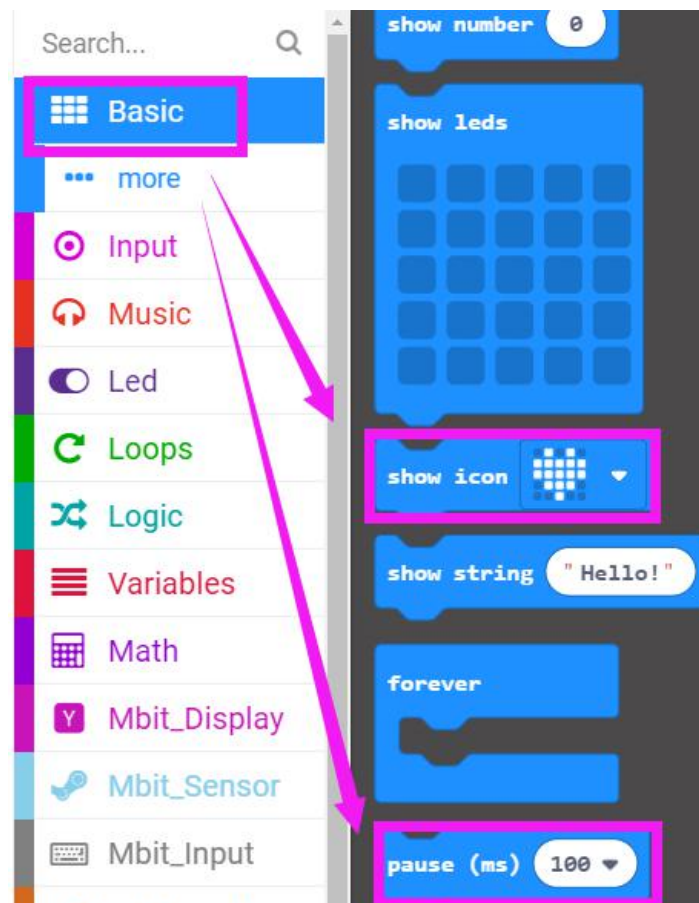
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: <http://microbit.org/> to enter the programming interface. Add the Yahboom package https://github.com/lzty634158/yahboom_mbit_en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

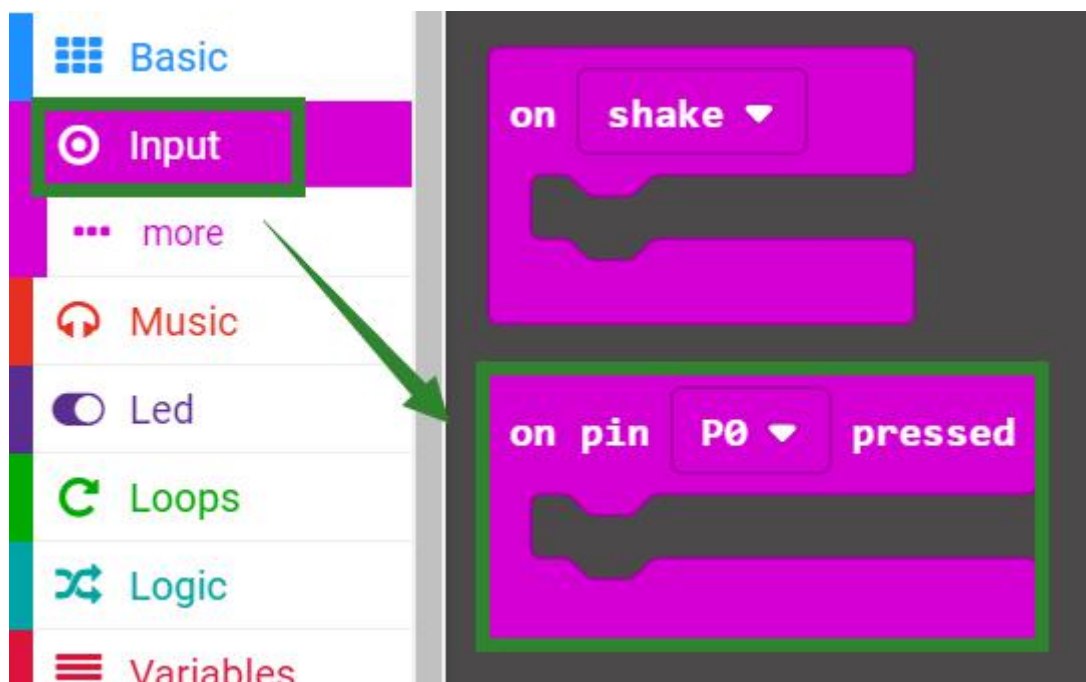
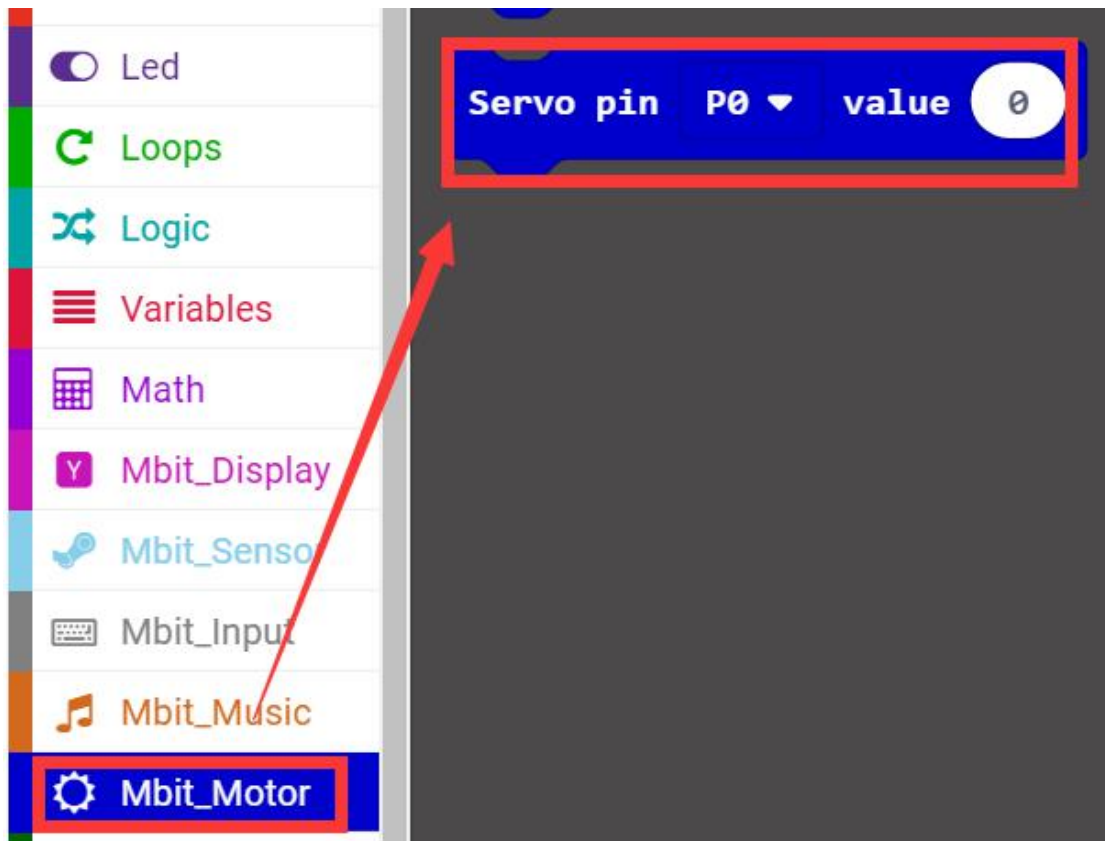
Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click 【New Project】 , add Yahboom package:

https://github.com/lzty634158/yahboom_mbit_en , you can program.

3.Looking for blocks

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

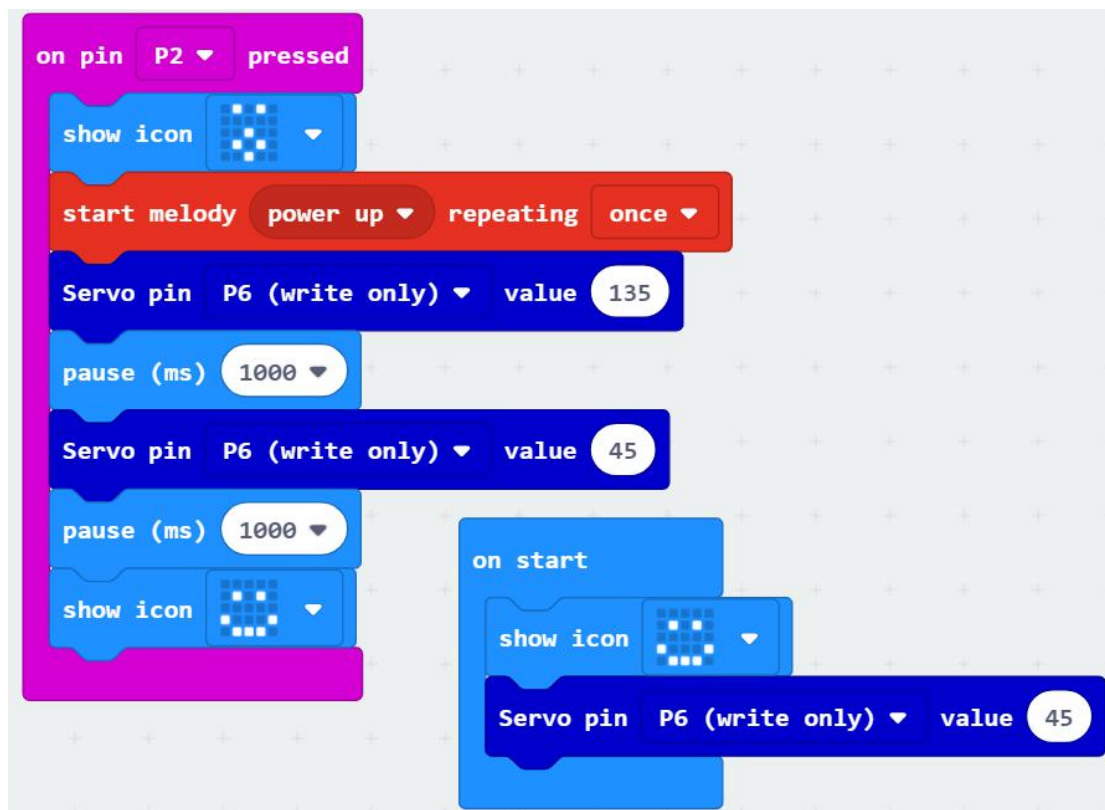




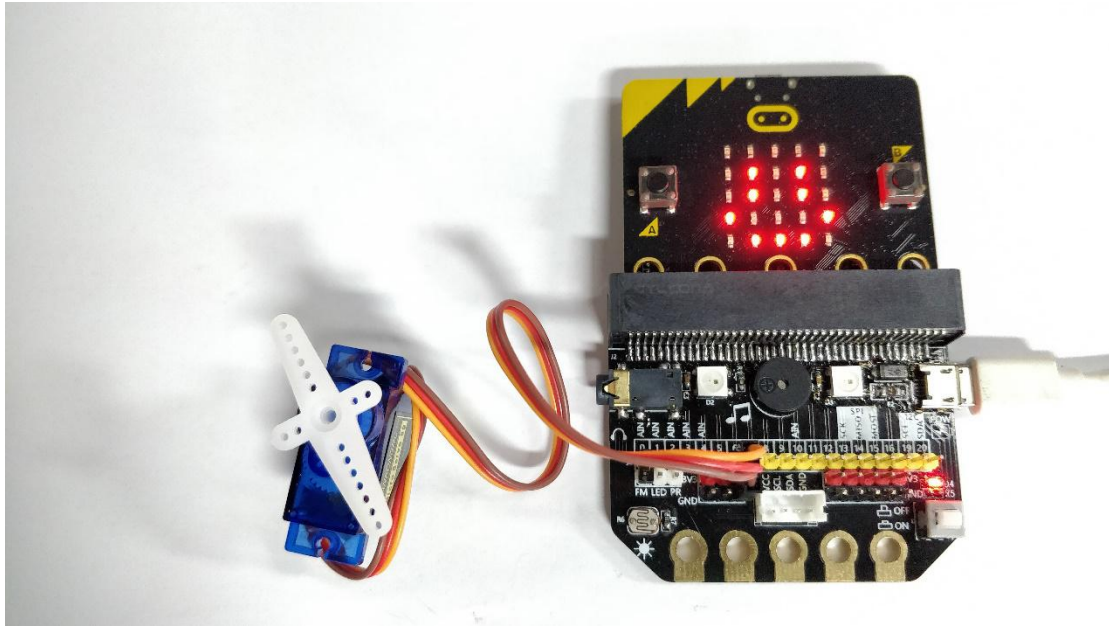


4.Combine building block

The summary program is shown below:



Note: The jumper cap needs to be installed on the P0 and FM, P2 and PR pins on the basic expansion board. As shown below.



5. Experimental phenomena

After the program is successfully downloaded, the micro:bit dot matrix display a smile, and the servo is turned to 45°; when P2 and GND are touched at the same time, the micro:bit dot matrix will display a surprise expression, while playing the music “power up” and servo to 145°.

After 1 second, the servo turn to 45°, and the micro:bit dot matrix display smile.