

Control-Servo

1.Learning goals

In this lesson we mainly know servo and learn how to make the servo by graphical programming.

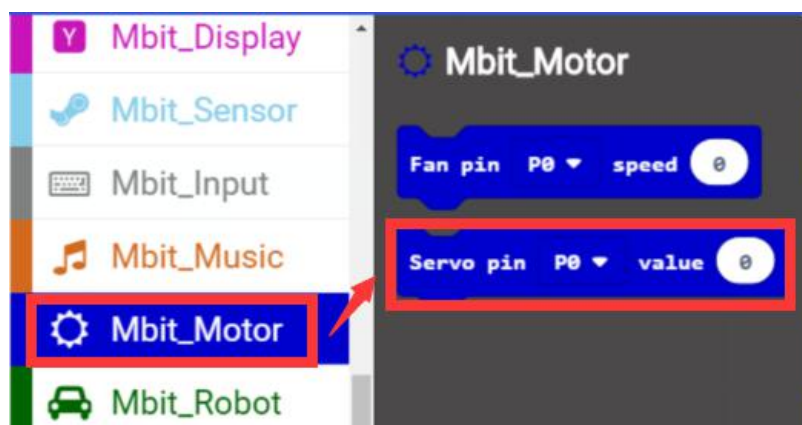
2.Programming method:

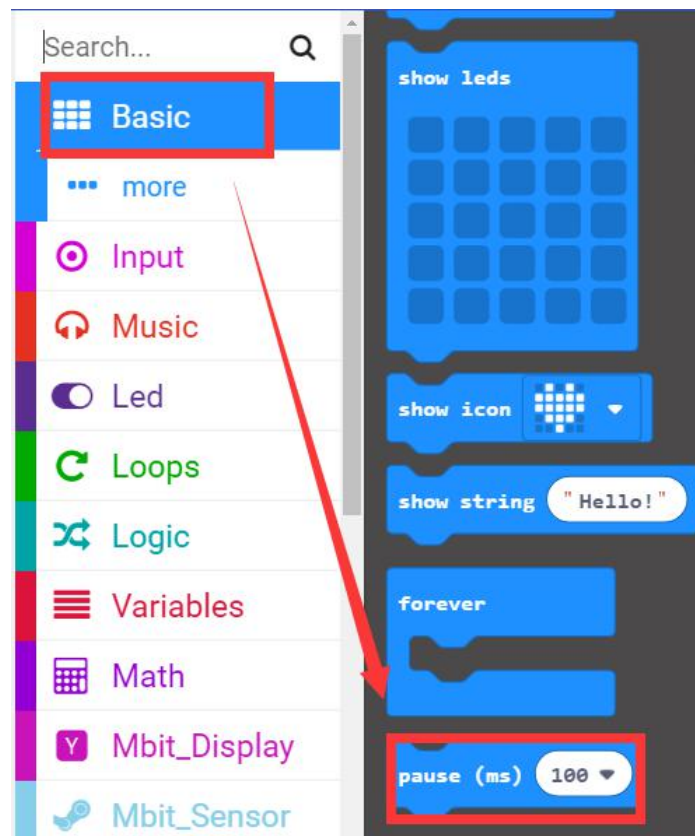
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: <http://microbit.org/> to enter the programming interface. Add the Yahboom package https://github.com/lzty634158/yahboom_mbit_en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





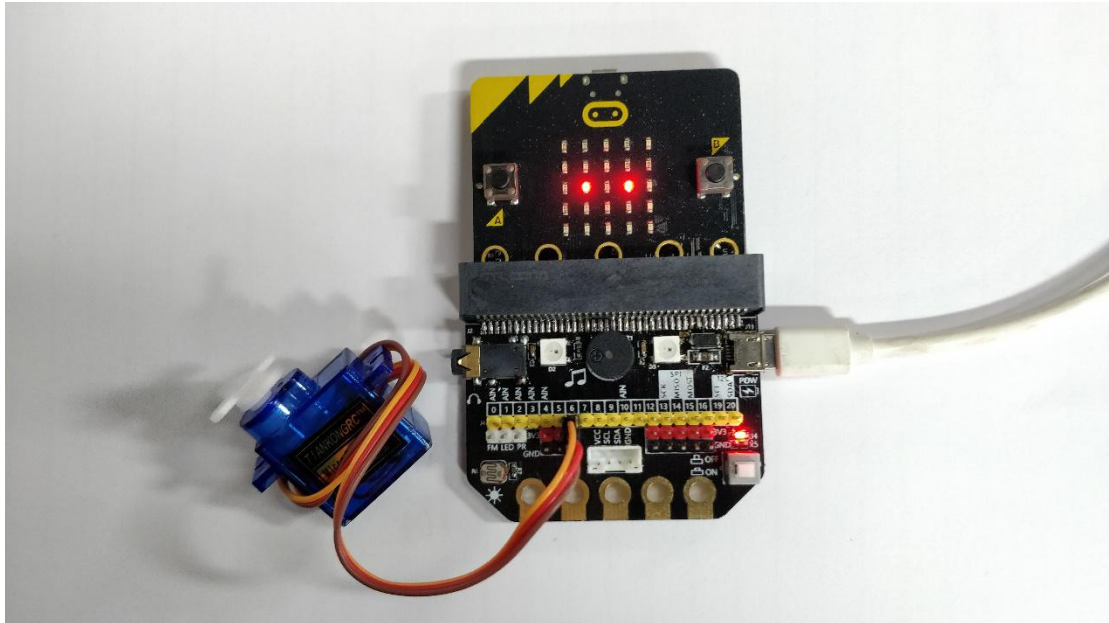
4.Combine building block

The summary program is shown below:



5.Install servo

We connect the SG90 servo to the P6 interface of the micro:bit basic expansion board, that is, the orange wire of the servo is connected to the P6 pin, the red wire is connected to the red pin(VCC), and the brown wire is connected to the black pin(GND). As shown below.



6. Experimental phenomena

After the program is successfully downloaded, the micro:bit dot matrix will display two dots, the servo turns $0^{\circ} \rightarrow 90^{\circ} \rightarrow 180^{\circ} \rightarrow 90^{\circ}$ and keeps the cycle.