

Changing Face

1.Learning target

In this course, we will learn how to use Micro:bit and ultrasonic module to make a changing face.

2. Preparation

Connect the module to Micro:bit board by expansion board, as shown below.

The building block parts required for assembling the trolley need to be purchased additionally. Link:<https://category.yahboom.net/products/world-of-module>



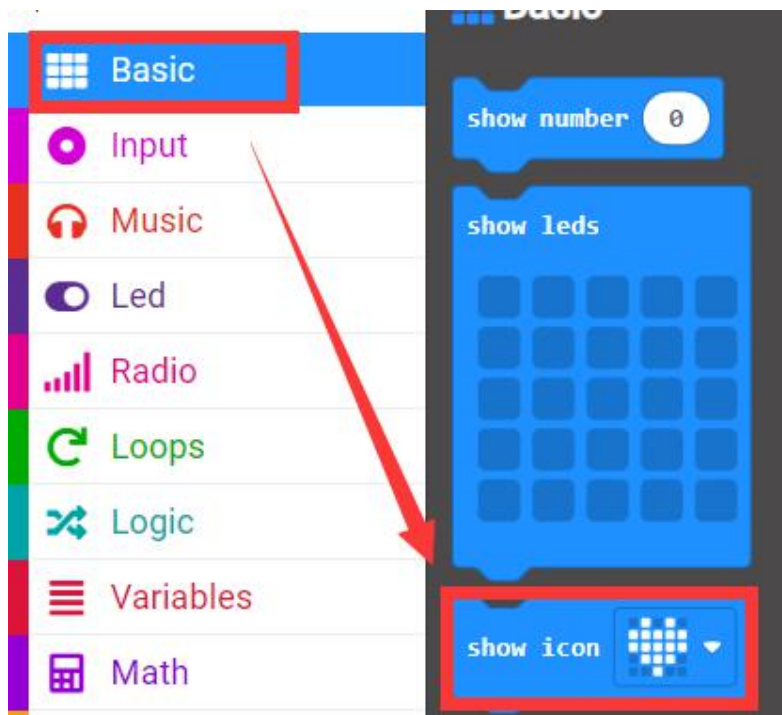
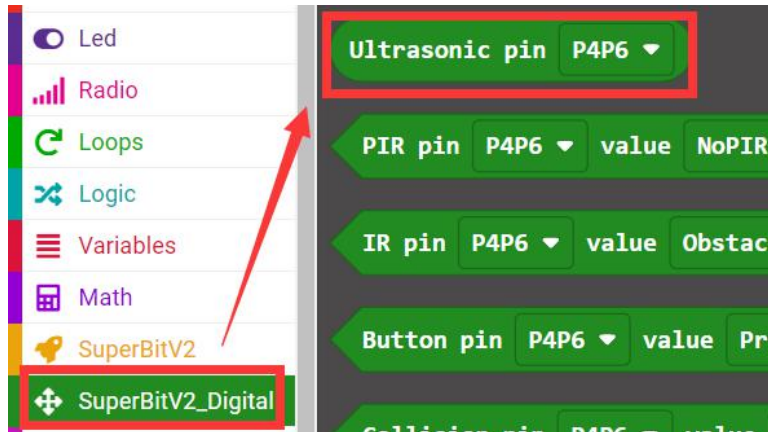
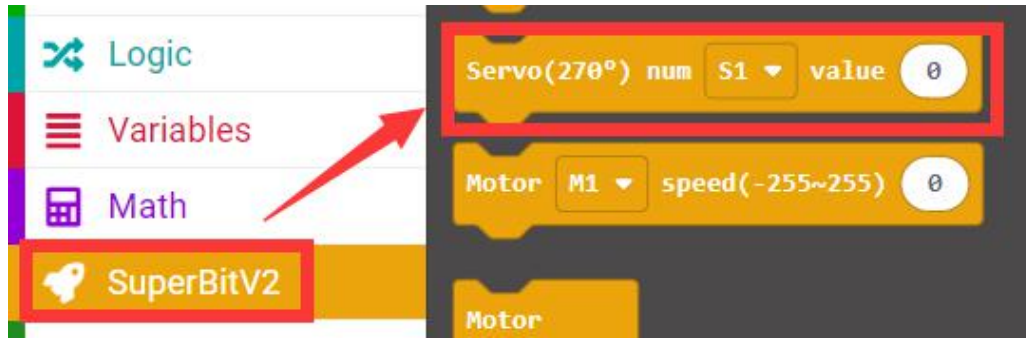
3.Programming method

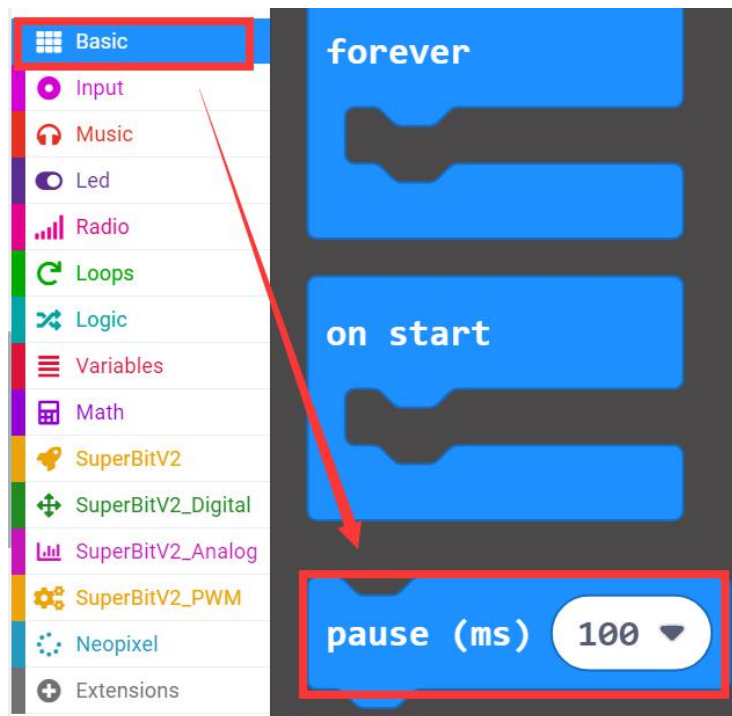
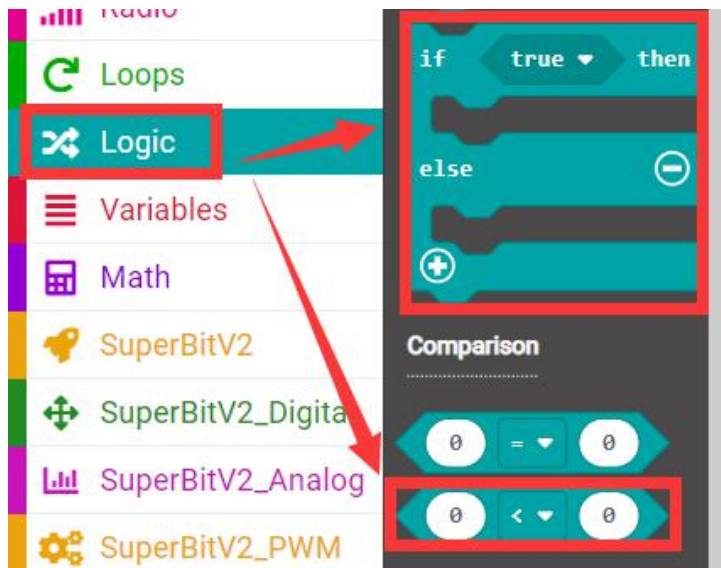
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: <http://microbit.org/> to enter the programming interface. Add the Yahboom package <https://github.com/YahboomTechnology/SuperBitLibV2> 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/YahboomTechnology/SuperBitLibV2>, you can start programming.

4.Looking for blocks

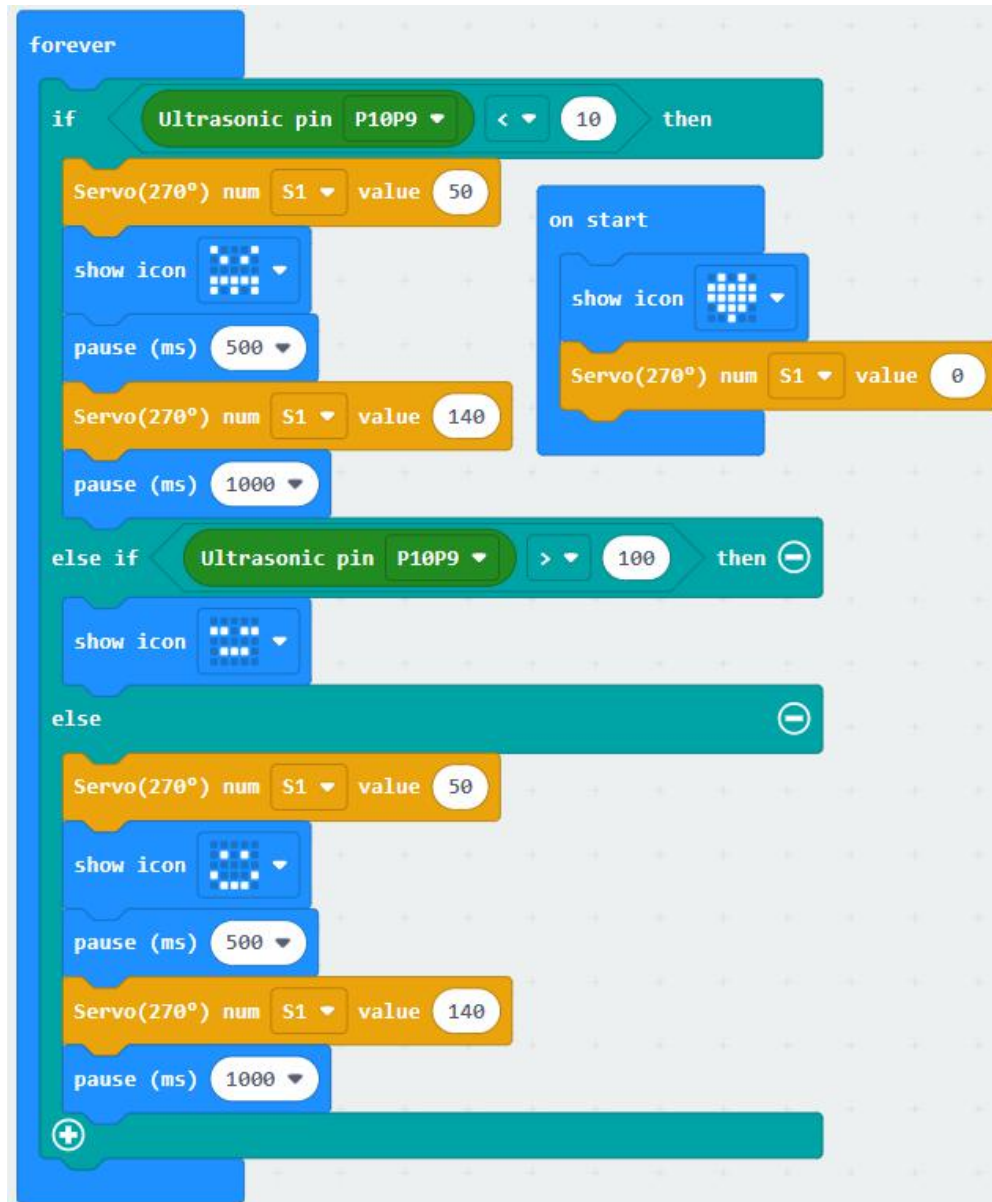
The following is the location of the building blocks required for this programming.





5.Combine block

The summary program is shown below.



5. Phenomenon

After the program is downloaded successfully. Micro:bit dot matrix will display a heart. When the ultrasonic detects that the distance between obstacles is less than 10cm, the pattern on the Micro:bit lattice will be changed.