

Obstacle detection

1. Learning target

In this course, we will learn how to use Micro:bit and infrared detection sensor module to achieve obstacle detection function.

2. Preparation

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



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



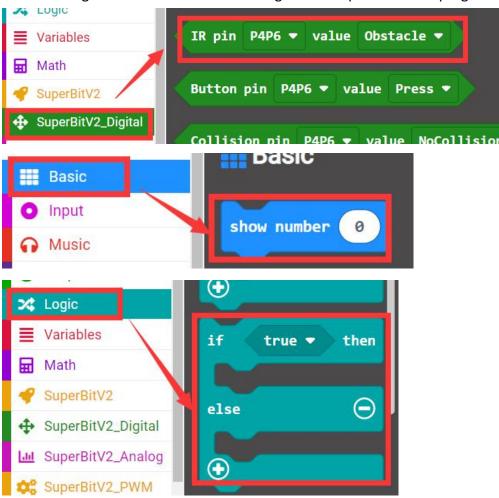
to program.

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

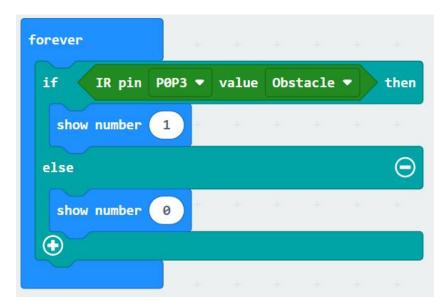
The following is the location of the building blocks required for this programming.



5.Combine block

The summary program is shown below.





6.Experimental phenomena

After the program is downloaded successfully. When an obstacle is detected, Micro:bit dot matrix will display 1; otherwise, it will display 0.