Play-steel-wire

1.Learning goals

In this course, we mainly use alligator clips, copper wire and tin foil. We will learn how to use the input building block to read whether pin P0 is touched. On the micro:bit dot matrix, how many times the metal wire is touched by the small metal ring.

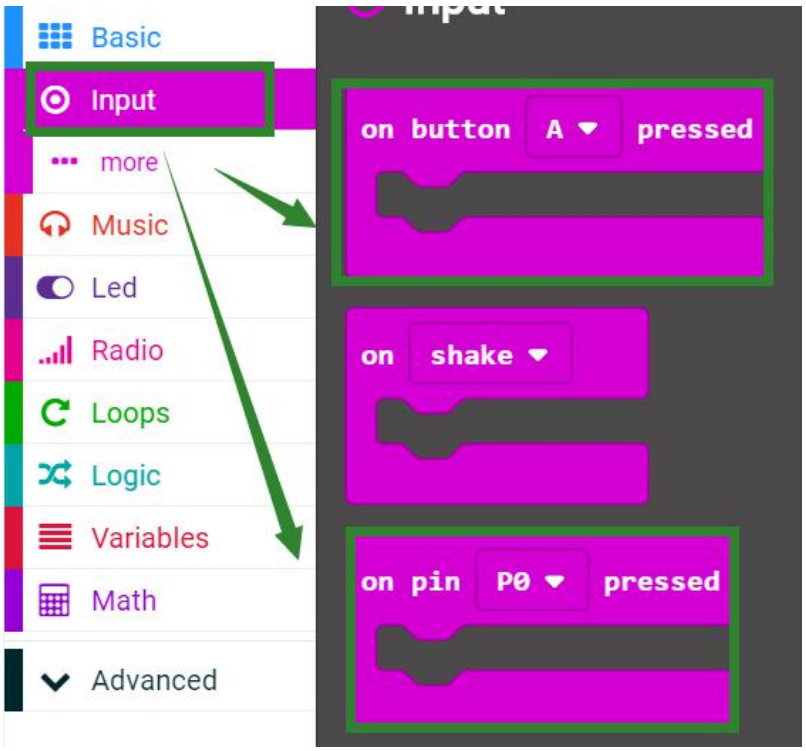
2.Programming method:

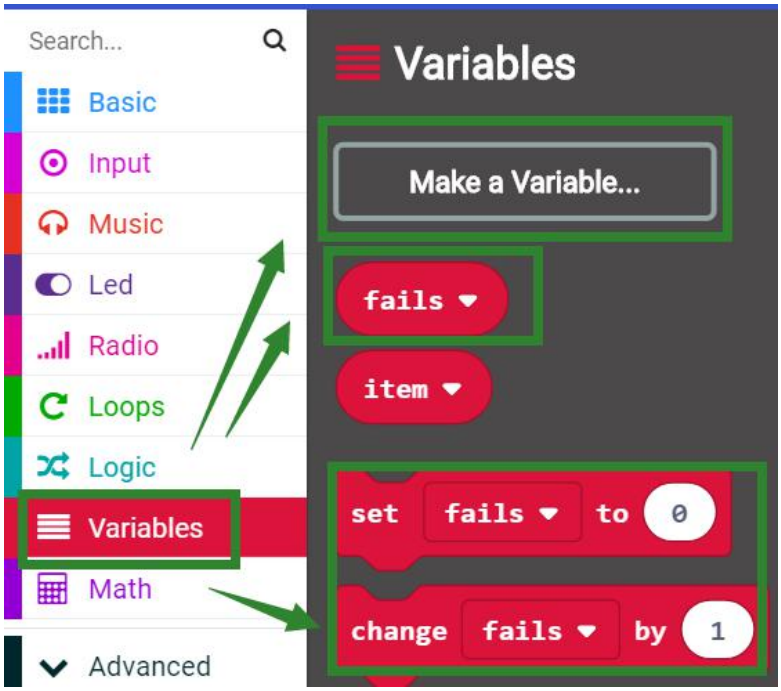
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: **http://microbit.org/** to enter the programming interface to program.

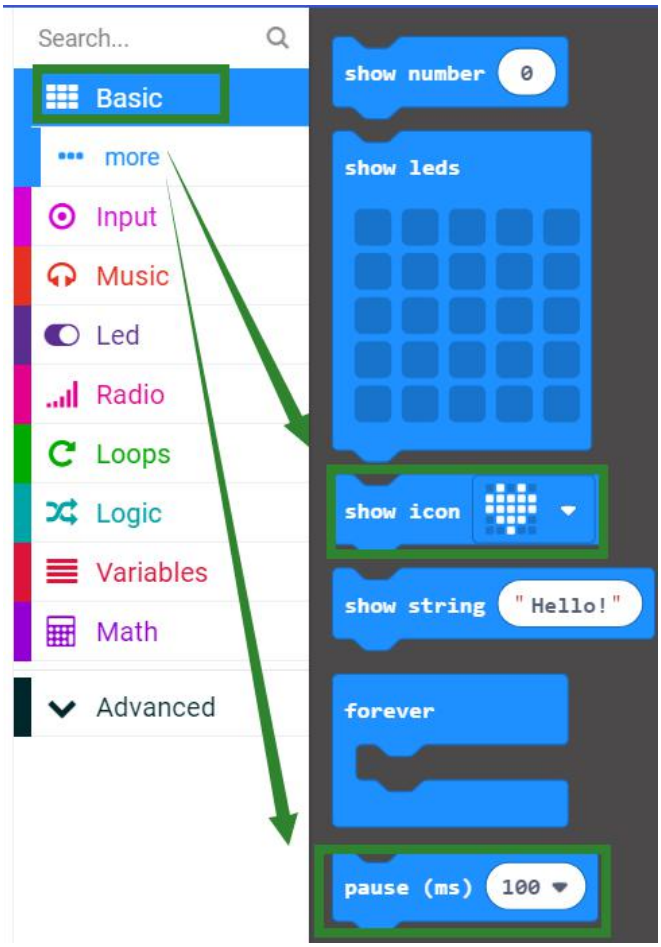
Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click【New Project】to program.

3.Looking for blocks

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





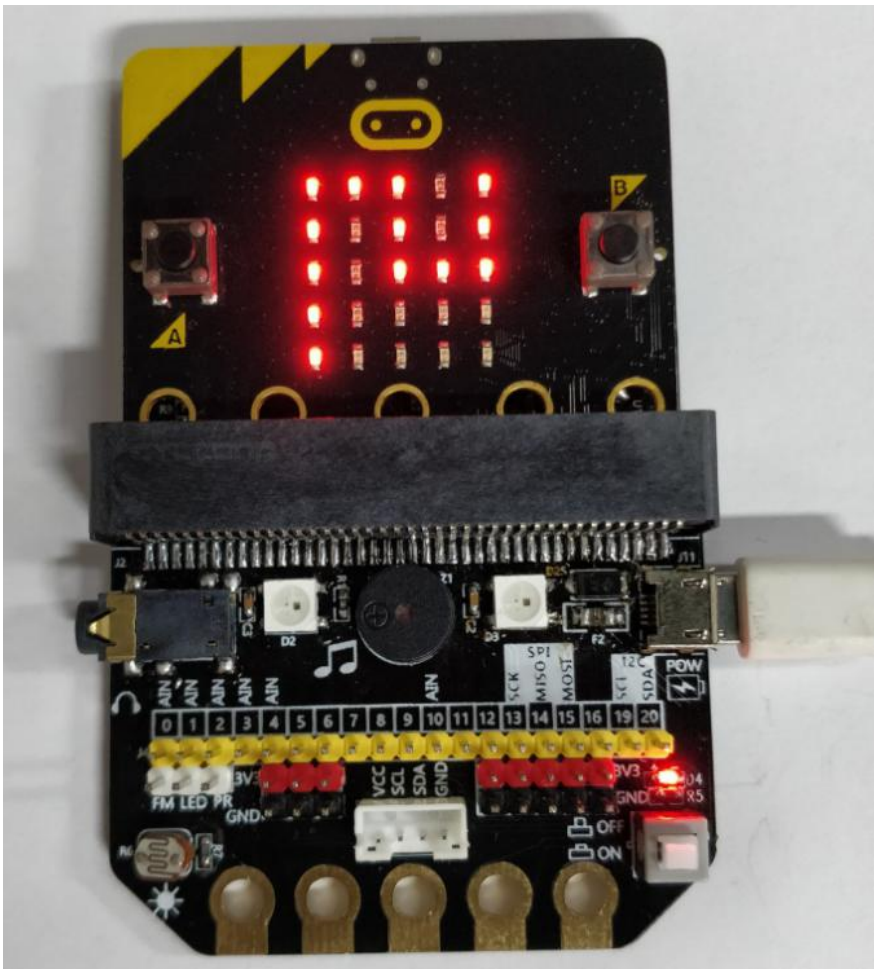


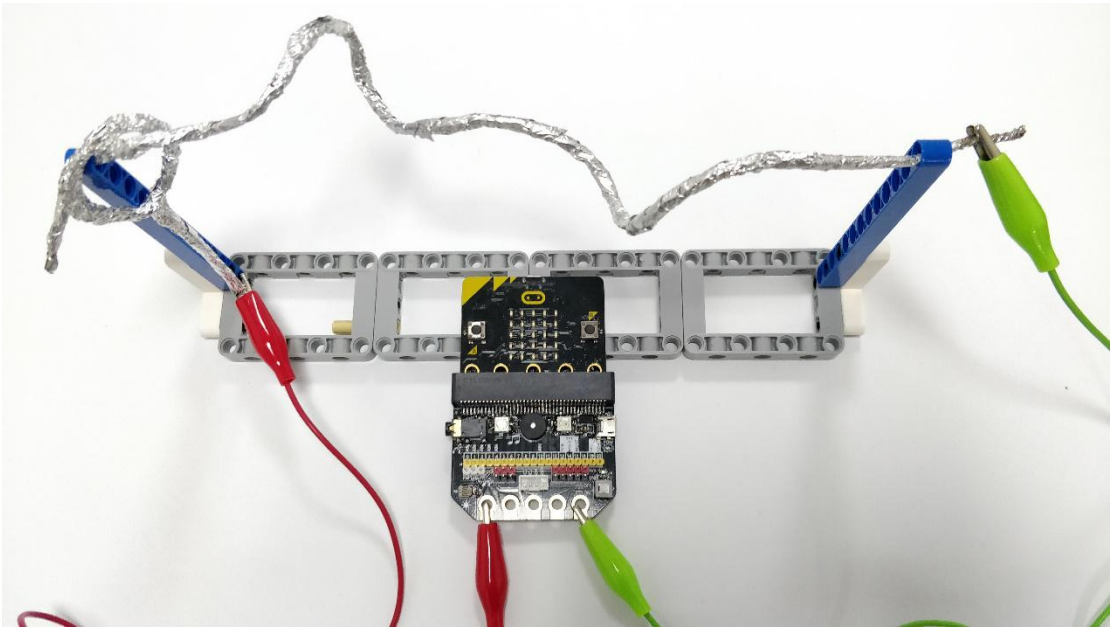
4.Combine building block

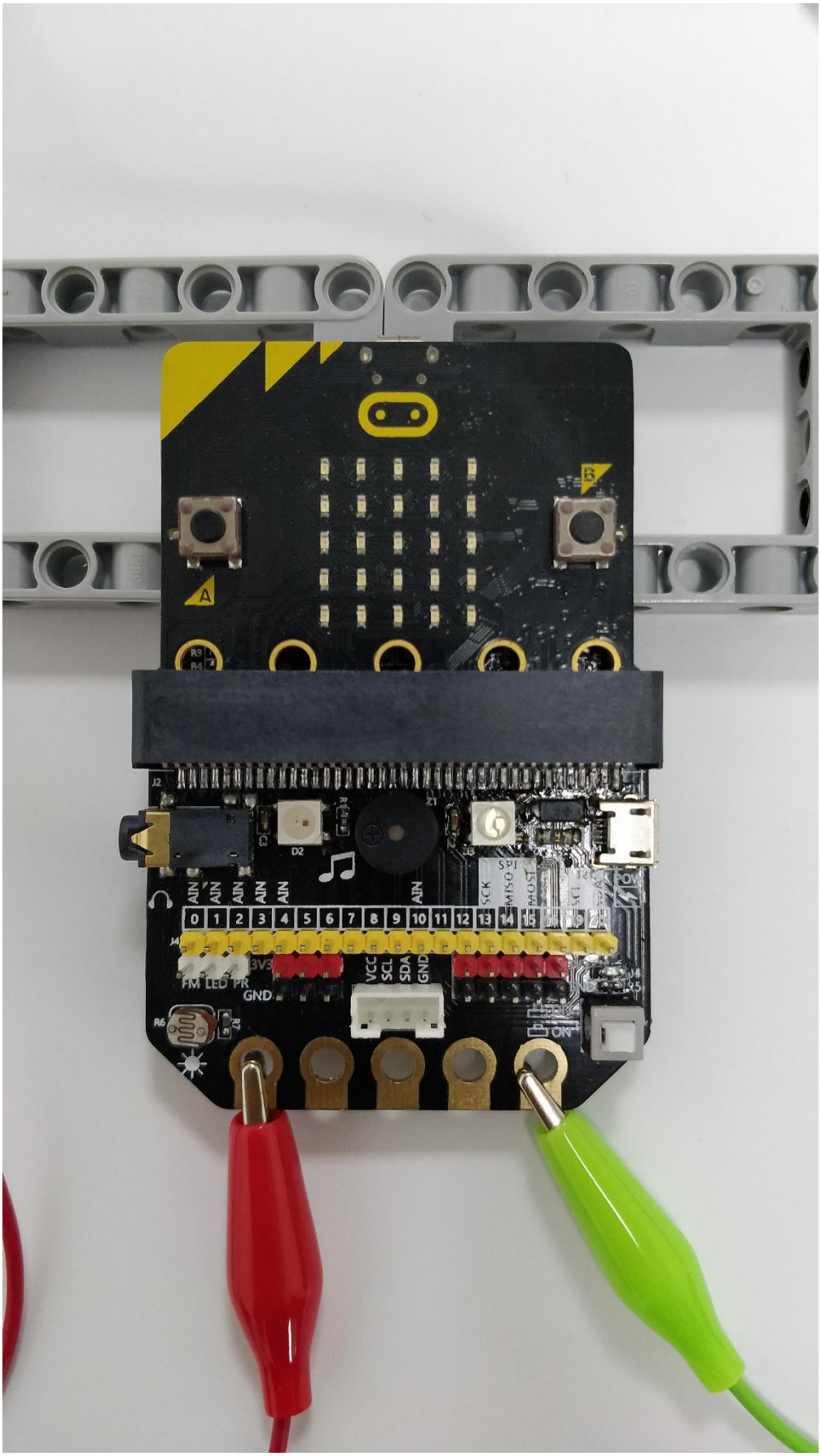
The summary program is shown below:

Note: The jumper cap needs to be removed on the P0 and FM on the basic expansion board. As shown below.

One end of the No.1 alligator clip is connected to the P0 interface of the basic expansion board, and the other end is connected to the small metal coil.
One end of the No.2 alligator clip is connected to the GND interface of the basic expansion board, and the other end is connected to the metal wire.






A
B
J2
D2
AIN
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
SCK
MISO
MOSI
3V3
FM LED PR
GND
VCC
SCL
SDA
GND
ON

5. Experimental phenomena

After the program is successfully downloaded, the micro:bit dot matrix will not display the content. After pressing button A, the micro:bit dot matrix will display the image of the starting game; after one second, the number of times the coil hits the wire will be displayed. Each time the small coil hits the wire, it will display “×” and show all the cumulative times that have been touched