Light up the dot matrix

1.Learning goal

In this course, we mainly know LED:bit and learn the use of building blocks in the LEDBit extension package.

The experimental results we are about to achieve is that, light up the dot matrix.

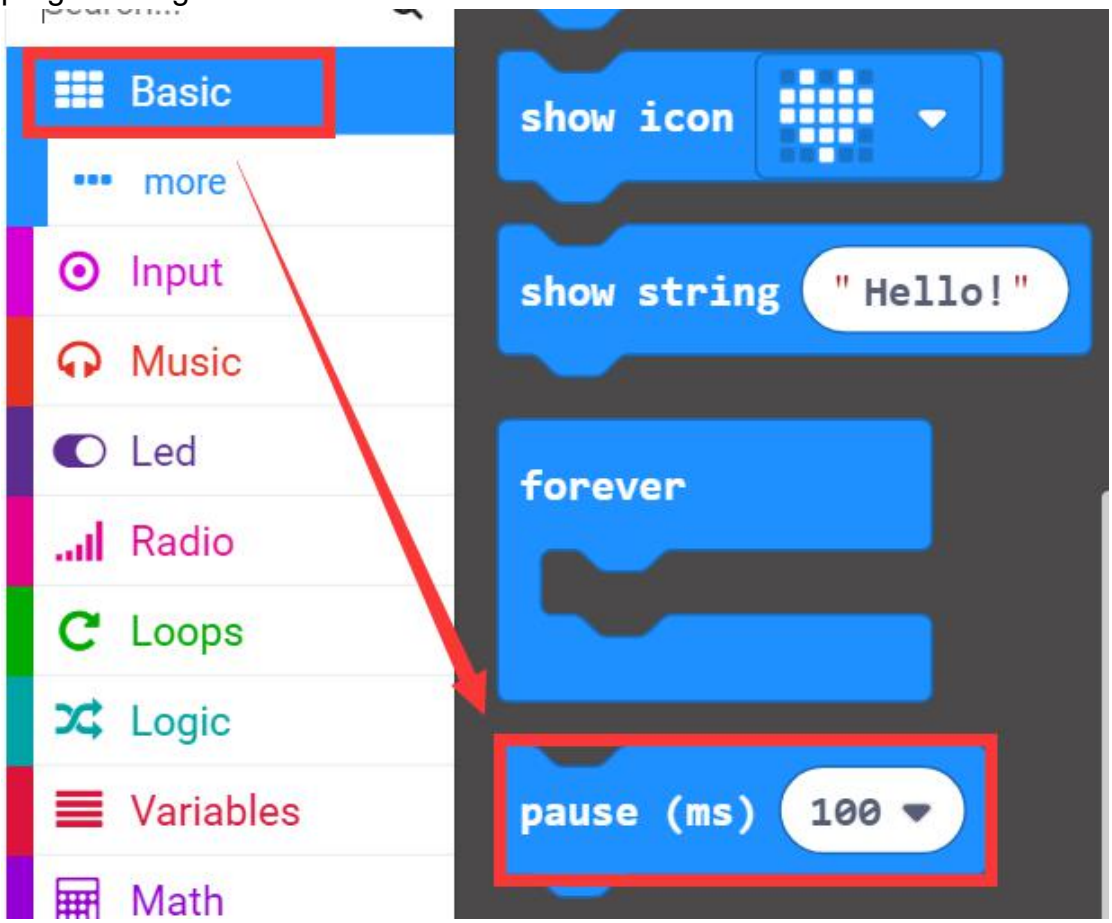
2.Programming method

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/LED-Bit** to program.

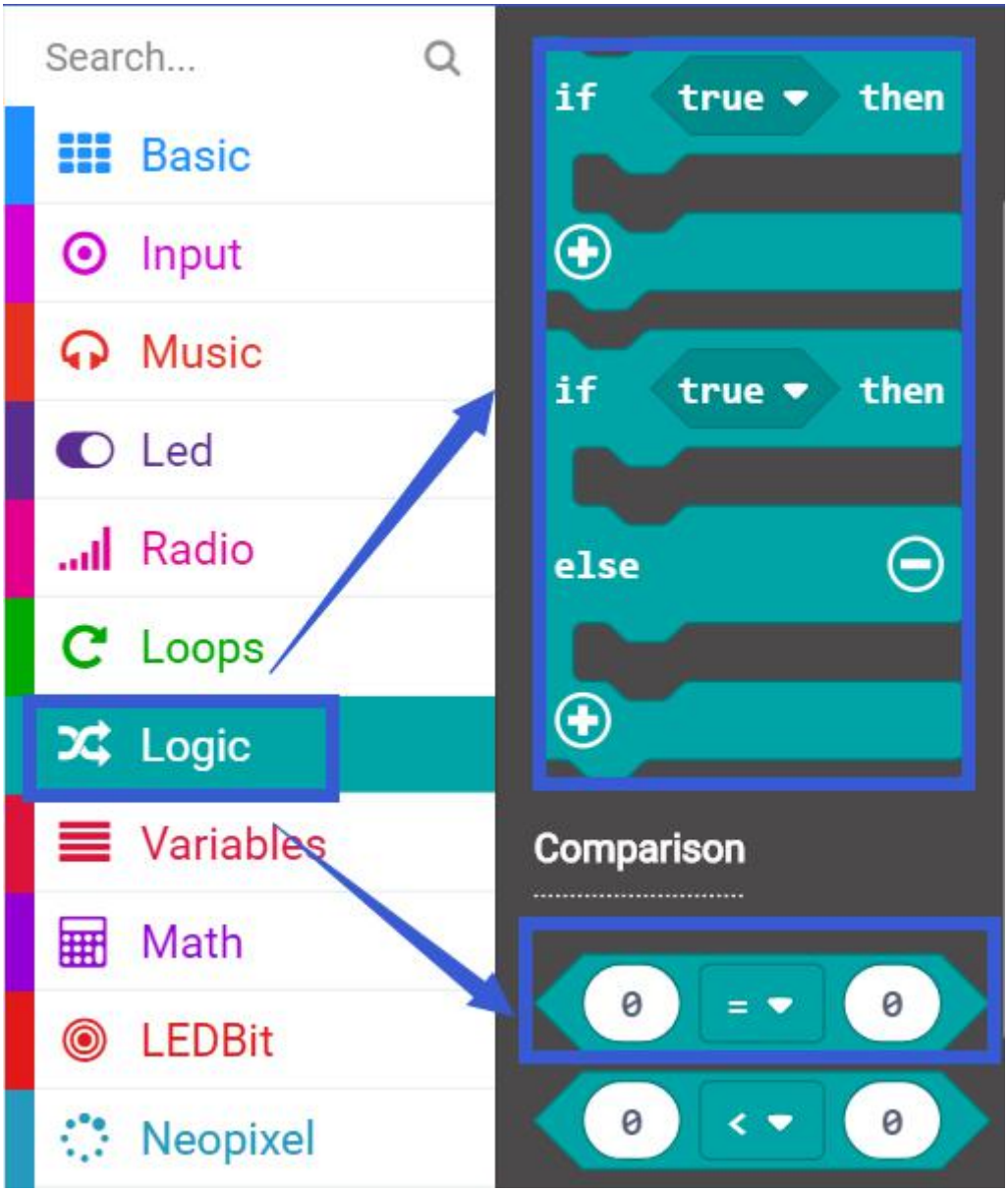
Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click【New Project】, add Yahboom package: **https://github.com/lzty634158/LED-Bit**, you can program.

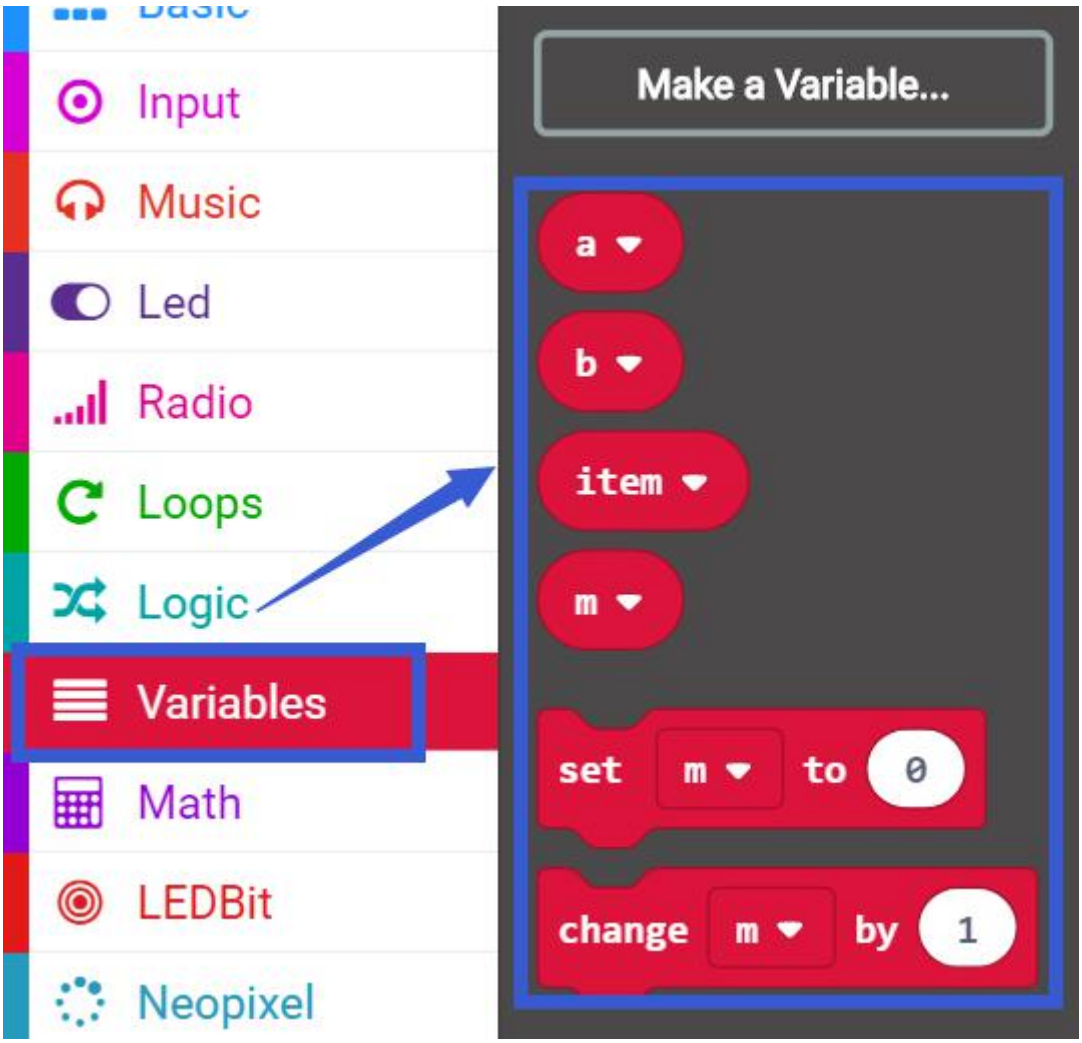
3.Looking for blocks

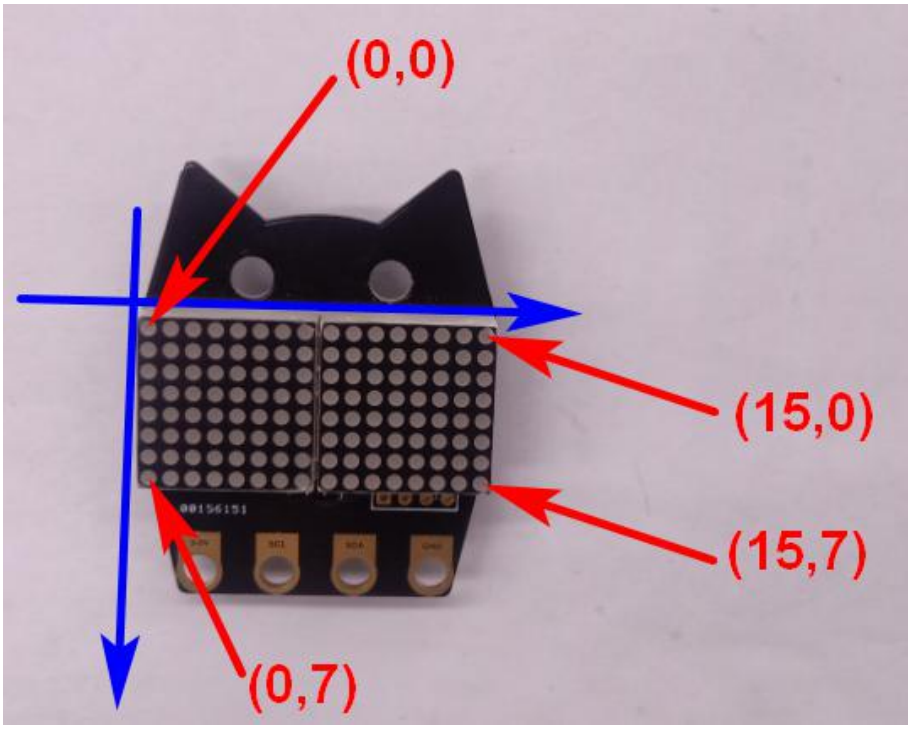
The following is the location of the building blocks required for this programming.




Logic
Variables
Math
LEDBit
Neopixel
LED expression Draw X 0 Y 0 OFF
LED expression Clear

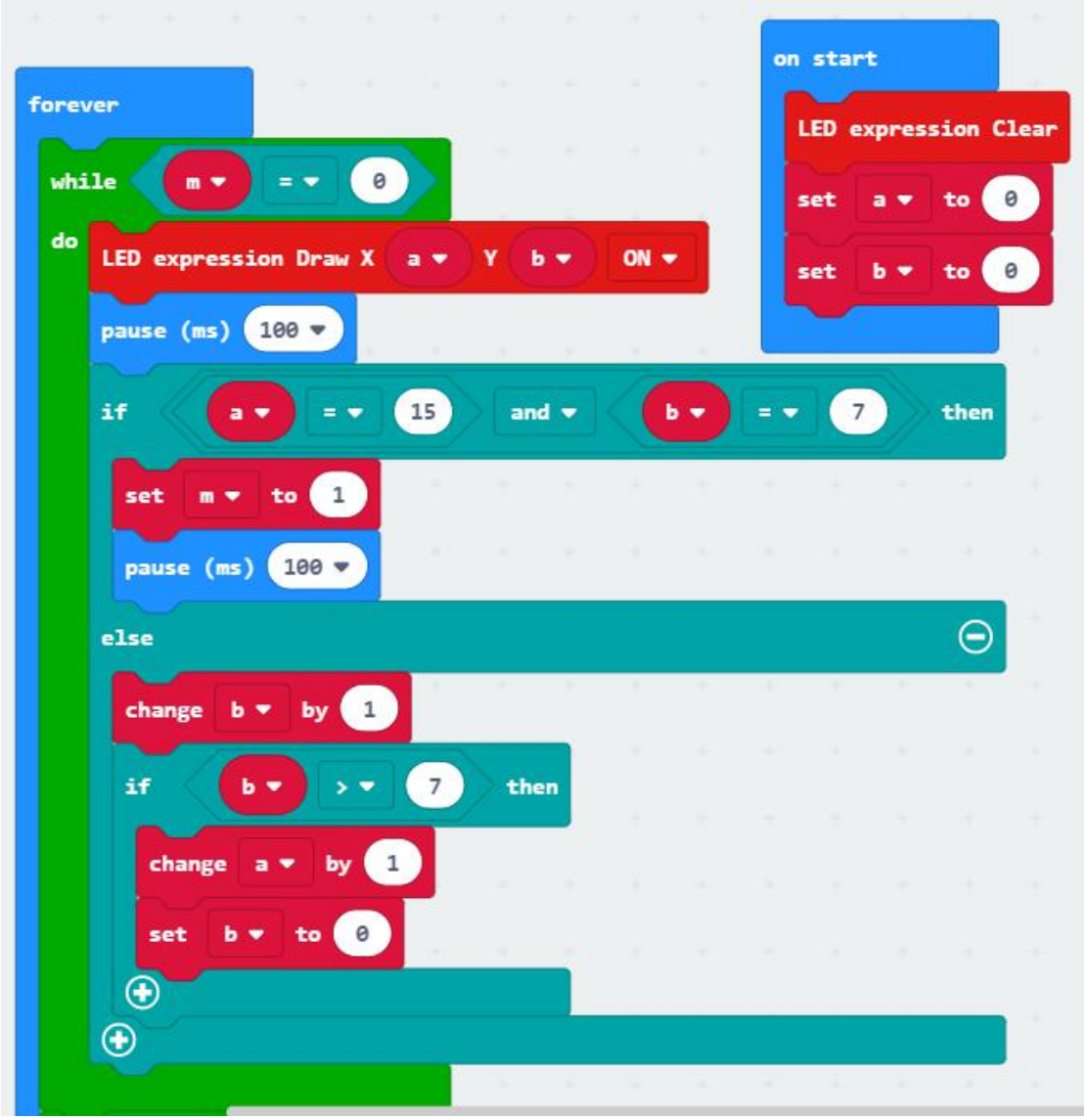

Search...
Basic
Input
Music
Led
Radio
Loops
Logic
Variables
Math
LEDBit
Neopixel
if true then
if true then
else
Comparison
0 = 0
0 < 0

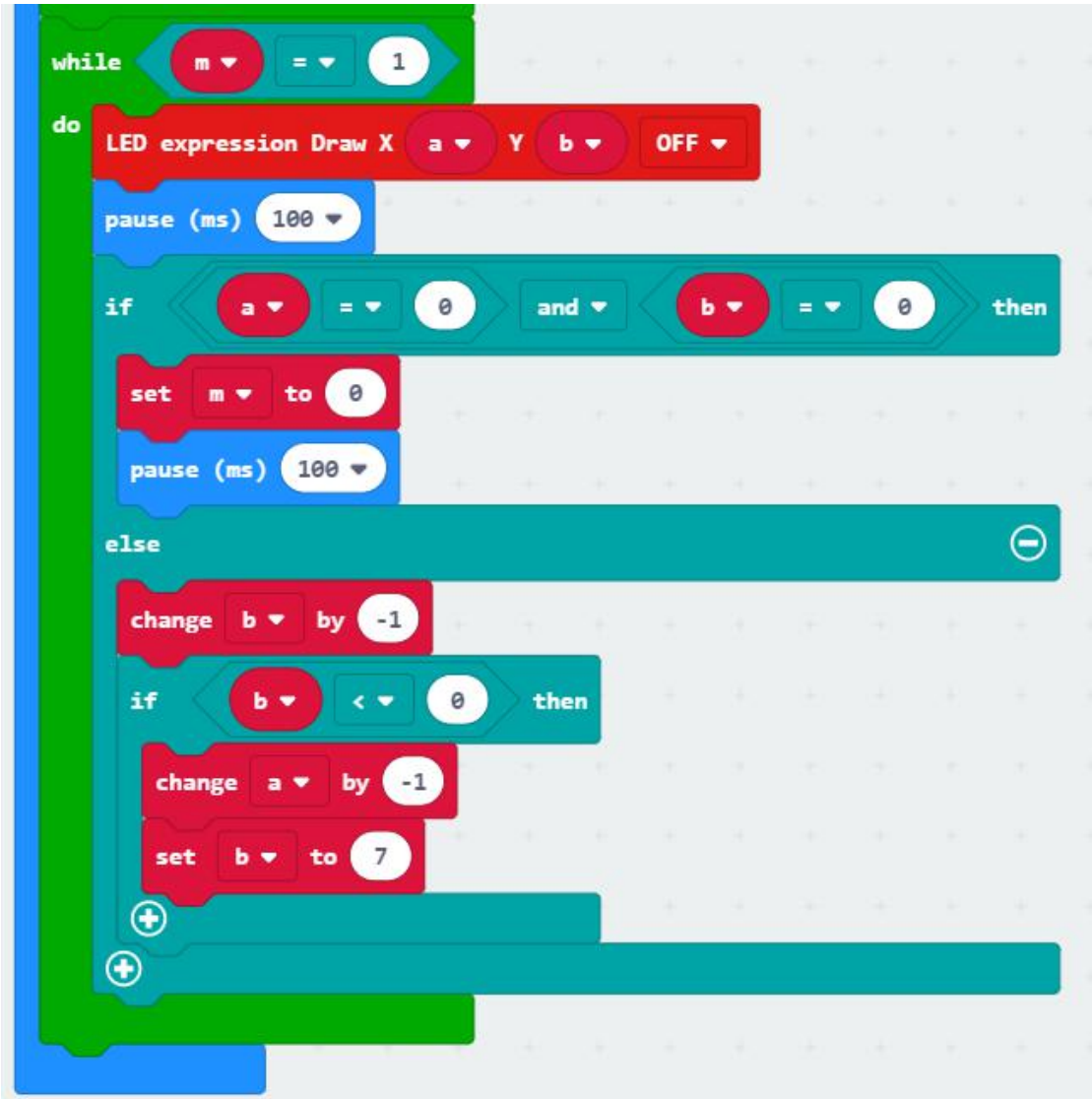

Input
Music
Led
Radio
Loops
Logic
Variables
Math
LEDBit
Neopixel
Make a Variable...
a
b
item
m
set m to 0
change m by 1


(0,0)
(15,0)
(15,7)
(0,7)

4.Combine building block

The summary program is shown below:





5. Experimental phenomena

After the program download is successful, we can see that the LED: bit will turn on form (0,0), (0,1) (0,2)...(15,7) in proper order and the last LED:bit will be on full screen. Then it will turn off from (15, 7), (15, 6)... in proper order.