

### 3.2 RGB Searching light

RGB light-1.hex

[http://www.yahboom.net/xiazai/Tiny\\_bit/3.Light%20of%20Tiny%20bit/RGB%20light-1.hex](http://www.yahboom.net/xiazai/Tiny_bit/3.Light%20of%20Tiny%20bit/RGB%20light-1.hex)

RGB light-2.hex

[http://www.yahboom.net/xiazai/Tiny\\_bit/3.Light%20of%20Tiny%20bit/RGB%20light-2.hex](http://www.yahboom.net/xiazai/Tiny_bit/3.Light%20of%20Tiny%20bit/RGB%20light-2.hex)

#### 1.Preparation

1-1.The position of the LED lights in the robot car

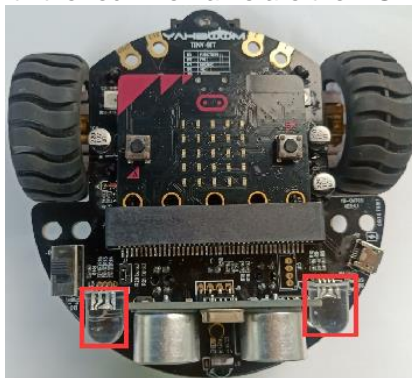
1-2.Learn about the principle of LED

#### 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/Tiny-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/Tiny-bit>, you can program.

In the picture shown below, the two lights with the red wire frame are the RGB Searching lights on the Tiny-bit.



**Principle:** LED light (red, green, blue) are packaged in the LED module. We can mix different colors(256\*256\*256) by controlling the brightness of the three LEDs.

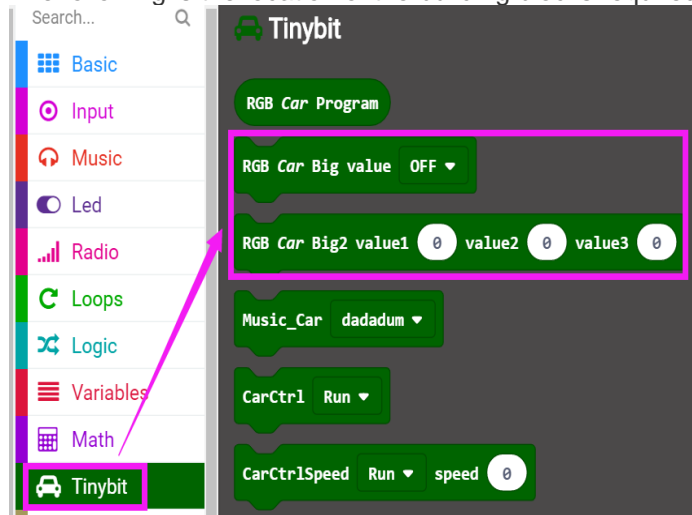
#### 2.Learning goal

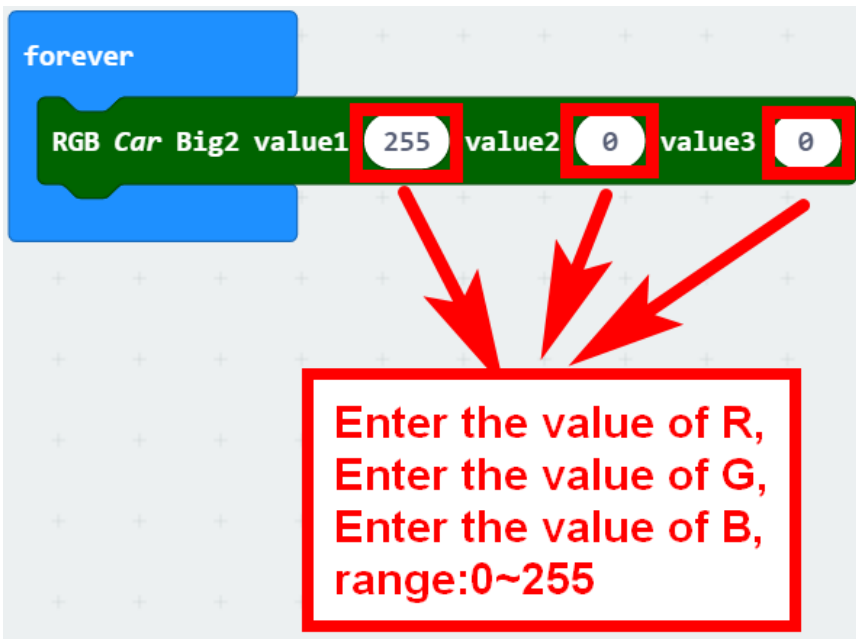
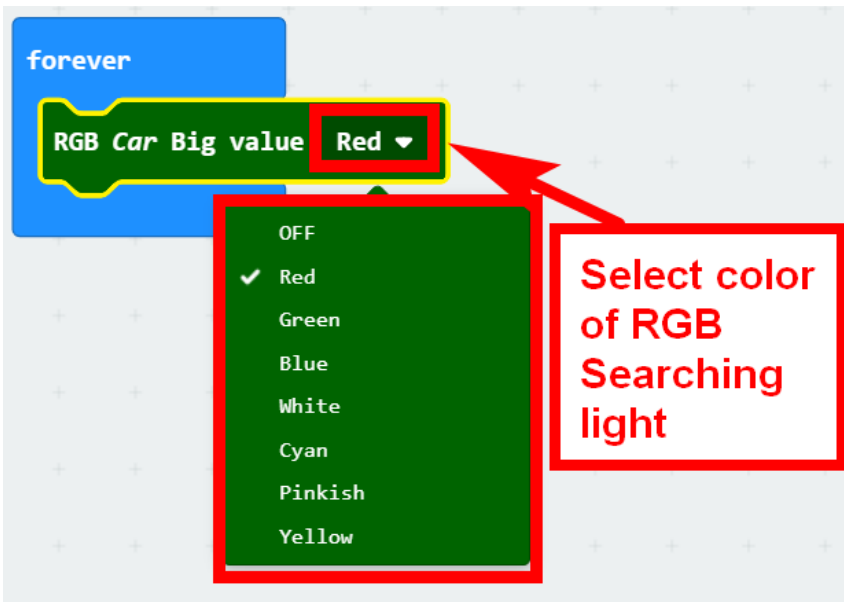
2-1.Learn how to use RGB Searching lights graphically program building blocks

2-2.In this lesson, we will learn to light up red RGB Searching lights on the Tiny-bit robot.

#### 3.Search for block

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

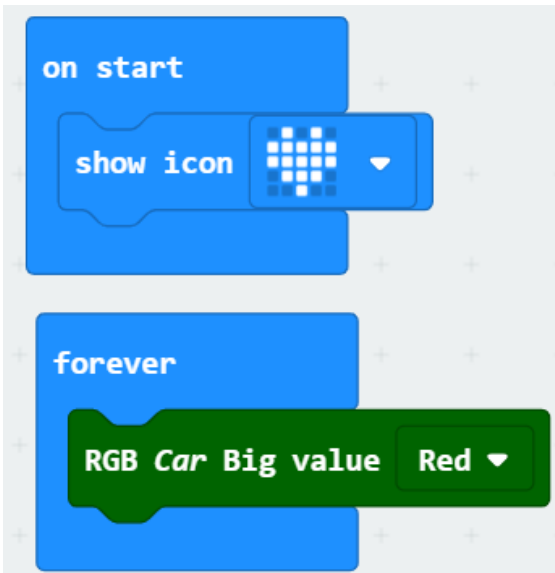




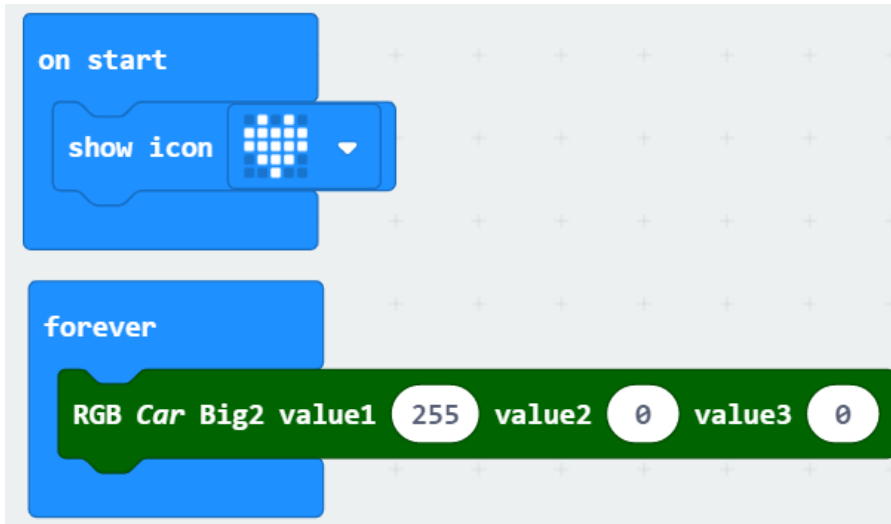
#### 4. Combine block

The summary program is shown below:

Method 1 :



Method 2 :



### 5. Experimental phenomena

After the program is downloaded, we can see that micro:bit board will display a heart pattern on the dot matrix. Two RGB Searching lights will be lit red, as shown below.

