2.RGB light change color

1. Learning goals

In this lesson, we will learn to how to control RGB light on wrist:bit change different color.

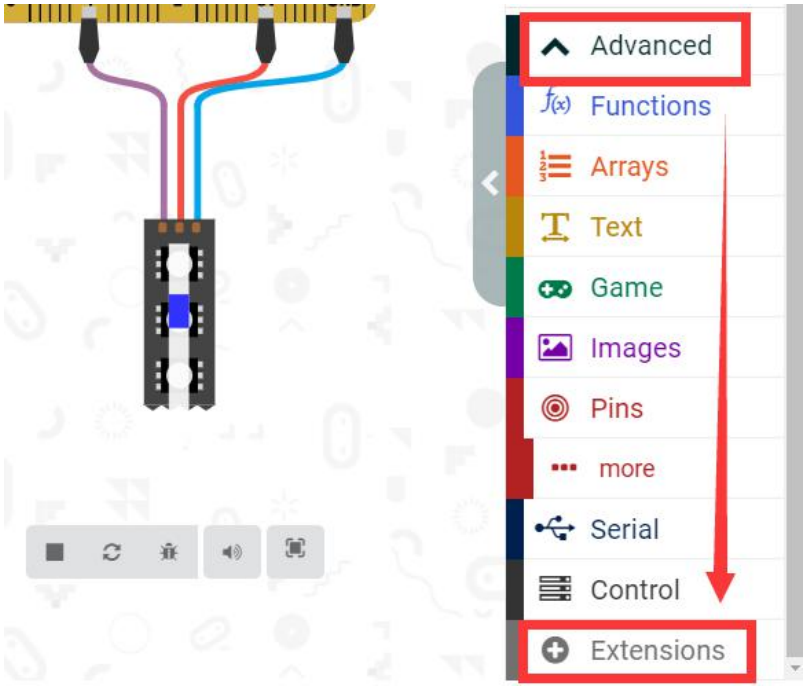
2. Programming method

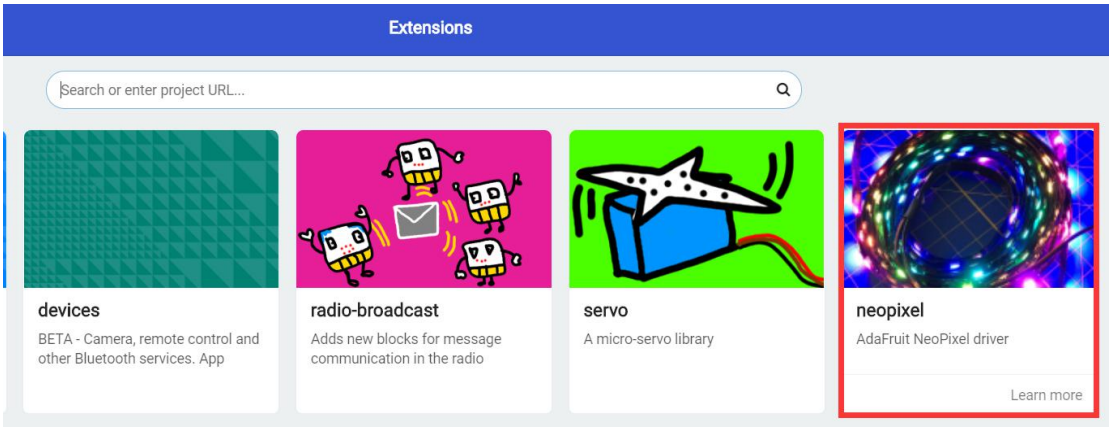
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: http://microbit.org/ to enter the programming interface to program.

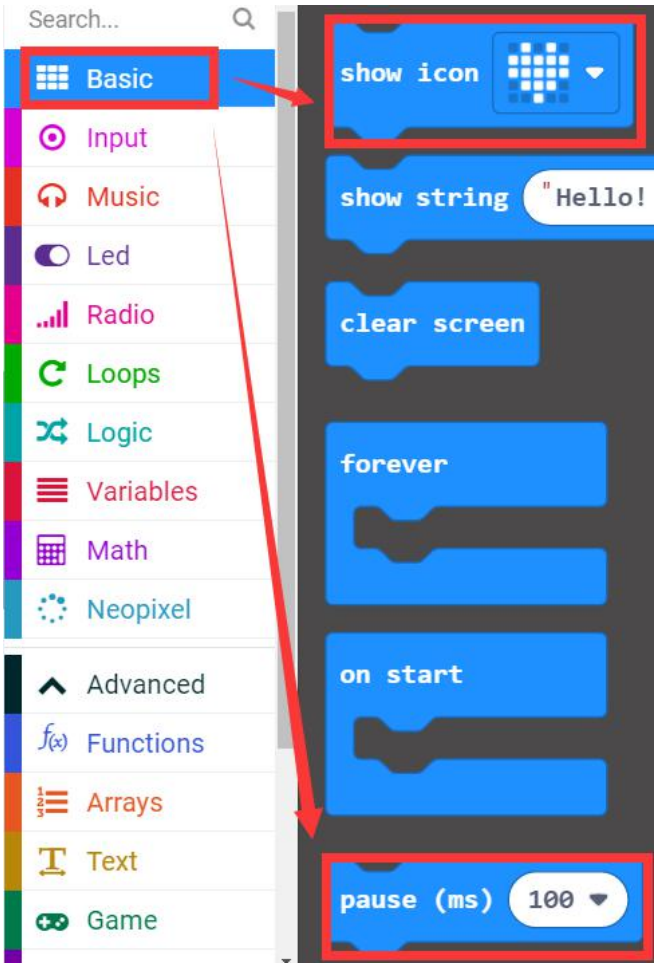
Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click【New Project】, you can program.

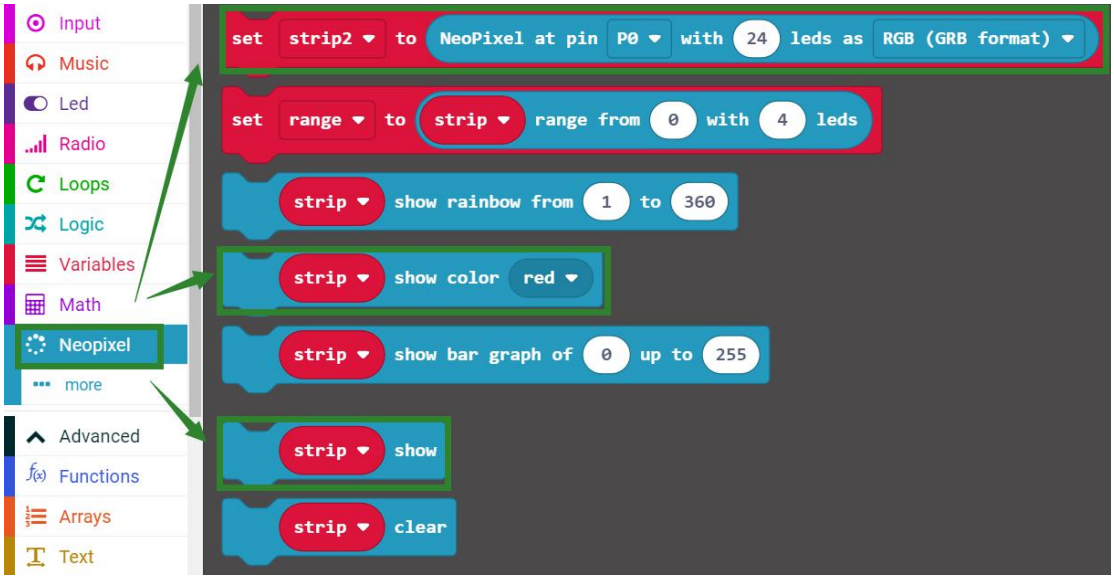
3. Looking for blocks

The following is the location of the building blocks required for this programming. Before programming, we nee to add Neopixel extension pack.



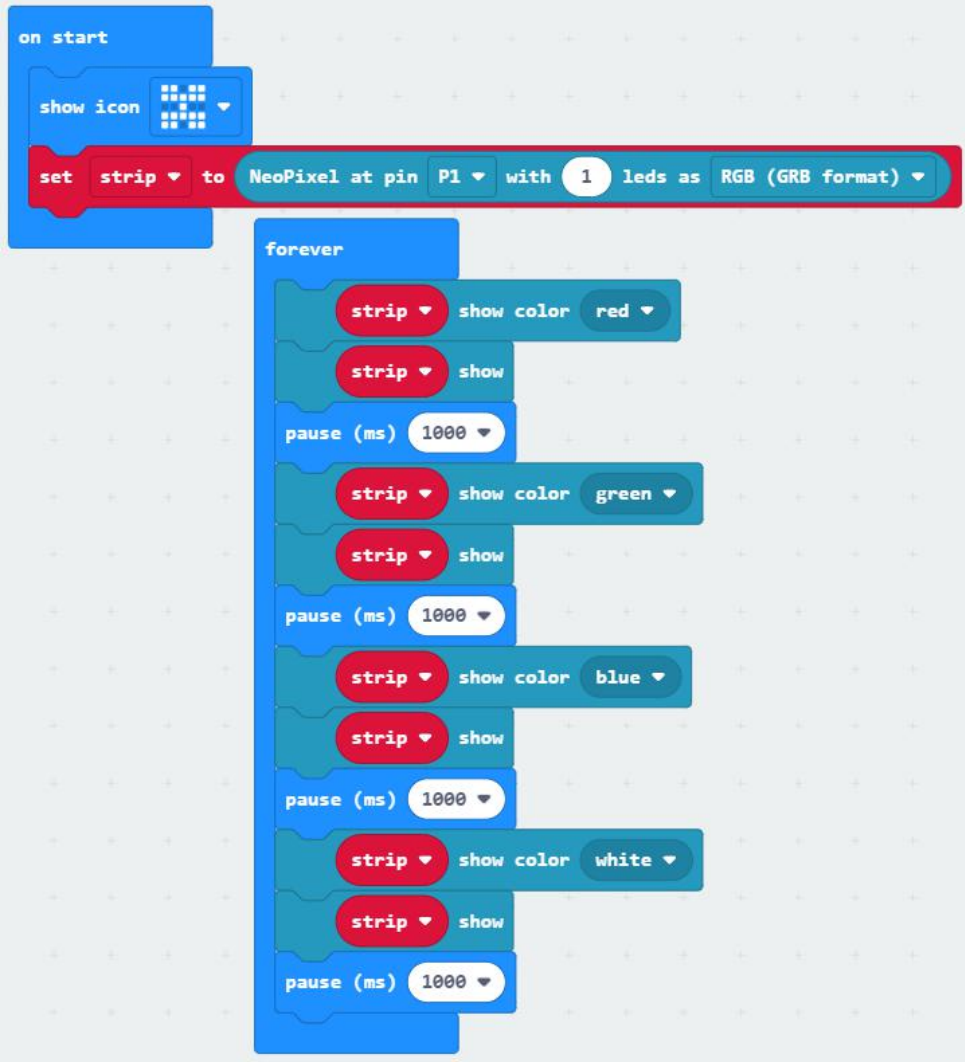

Extensions
Search or enter project URL...
devices
BETA - Camera, remote control and other Bluetooth services. App
radio-broadcast
Adds new blocks for message communication in the radio
servo
A micro-servo library
neopixel
AdaFruit NeoPixel driver
Learn more


Search...
Basic
Input
Music
Led
Radio
Loops
Logic
Variables
Math
Neopixel
Advanced
Functions
Arrays
Text
Game
show icon
show string "Hello!
clear screen
forever
on start
pause (ms) 100



4. Combine block

The summary program is shown below.



Due to RGB is connected to the P1 pin of the micro:bit on the hardware circuit, and there is one RGB light on the bitmotion:kit expansion board, the RGB light pin needs to be set to P1, and the number of LEDs is also set to 1.

5. Experimental phenomena

After the program is successfully downloaded, the micro: bit dot matrix will display butterfly pattern. RGB lights will become red-> green->blue->white, the time interval is 1s.