

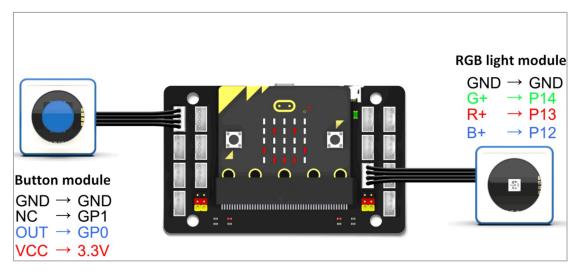
## **Table lamp**

## 1. Learning target

In this course, we will learn how to use Micro:bit and RGB light module to make a button lamp.

### 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: <a href="http://microbit.org/">http://microbit.org/</a> to enter the programming interface. Add the Yahboom package <a href="https://github.com/YahboomTechnology/Module-World">https://github.com/YahboomTechnology/Module-World</a> 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:

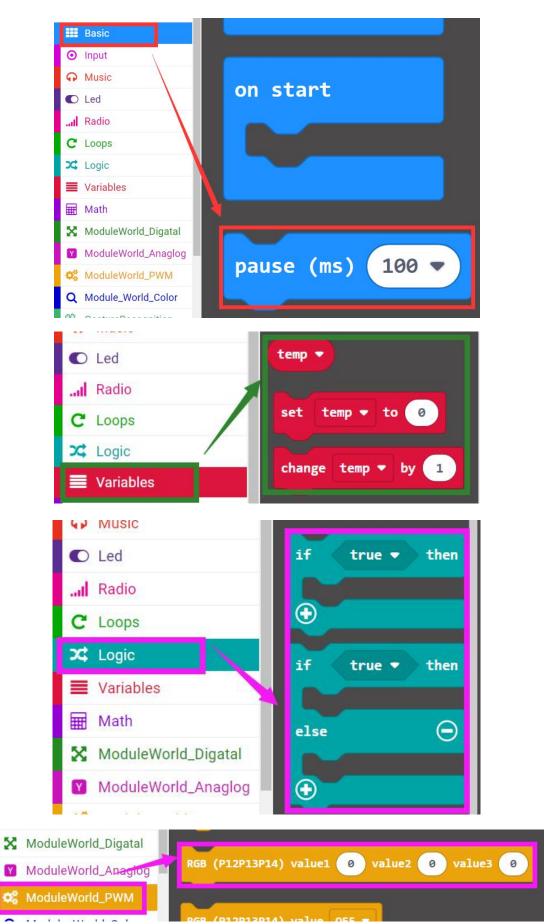
https://github.com/YahboomTechnology/Module-World, you can start programming.

## 4.Looking for blocks

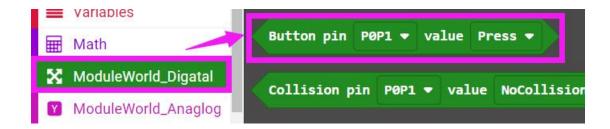
The following is the location of the building blocks required for this programming.











#### 5.Combine block

The summary program is shown below.

```
forever
      Button pin P0P1 ▼ value Press ▼
                                        then
  pause (ms) 100 ▼
         Button pin P0P1 ▼ value Press ▼
     pause (ms)
               1 -
                                              on start
                                                    temp ▼ to 0
  change temp ▼ by 1
                              then
        temp ▼ to 0
  ①
(
                            then
                      0
                               then 🕣
else if
                        1
(
```



# **6.Experimental phenomena**

After the program is downloaded successfully. When we press button module at the first time, RGB light will become white; when we press button module at the second time, RGB light will off.