Traffic Light Experiment

Module Introduction

The traffic light module is composed of three LEDs. We can imitate the traffic lights through this module.

Purpose of the Experiment

Simulate traffic lights.

Device List

- BLE-UNO Main Board: 1
- Expansion Board of H2.0 Sensor :1
- USB Data Wire: 1
- Traffic Lights:1
- 5PIN Wire Jumper: 1

Physical Wiring Diagram

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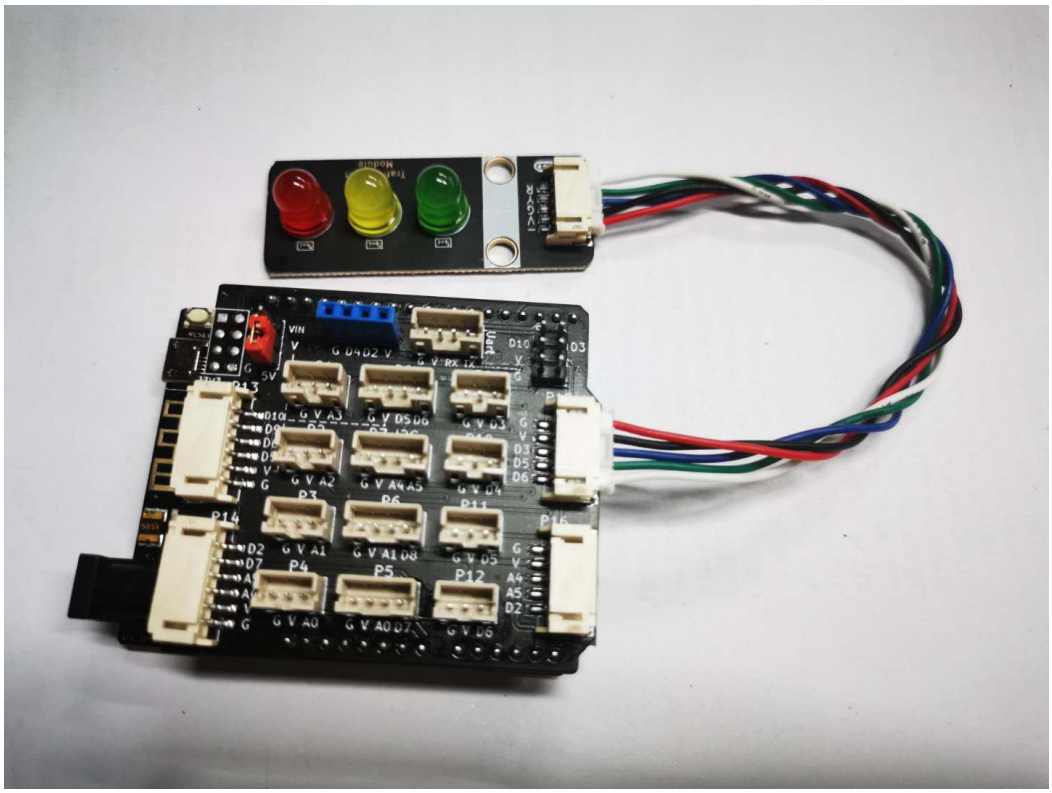

Program Code

```
#define RGB_RED       6//Control the red light pin
#define RGB_GREEN    3//Control the green light pin
#define RGB_YELLOW      5//Control yellow light pin

void setup()
{
      pinMode(RGB_RED, OUTPUT);//Red light pin is set as output
      pinMode(RGB_GREEN, OUTPUT);//The green light pin is set as output
      pinMode(RGB_YELLOW, OUTPUT);//The yellow light pin is set as output
}

void loop()
{
       digitalWrite(RGB_RED, HIGH);//Red light on
       delay(1000);
       digitalWrite(RGB_GREEN, HIGH);//Green light on
       delay(1000);
       digitalWrite(RGB_YELLOW, HIGH);//Yellow light
       delay(1000);
```

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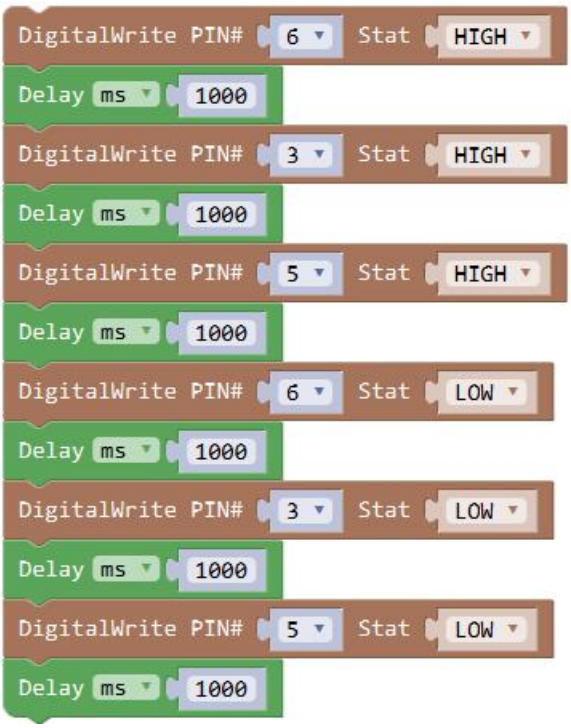
```
        digitalWrite(RGB_RED, LOW);//Red light off
        delay(1000);
        digitalWrite(RGB_GREEN, LOW);//Green light off
        delay(1000);
        digitalWrite(RGB_YELLOW, LOW);//Yellow light off
        delay(1000);
}
```

MagicBlock Program

Mixly Program



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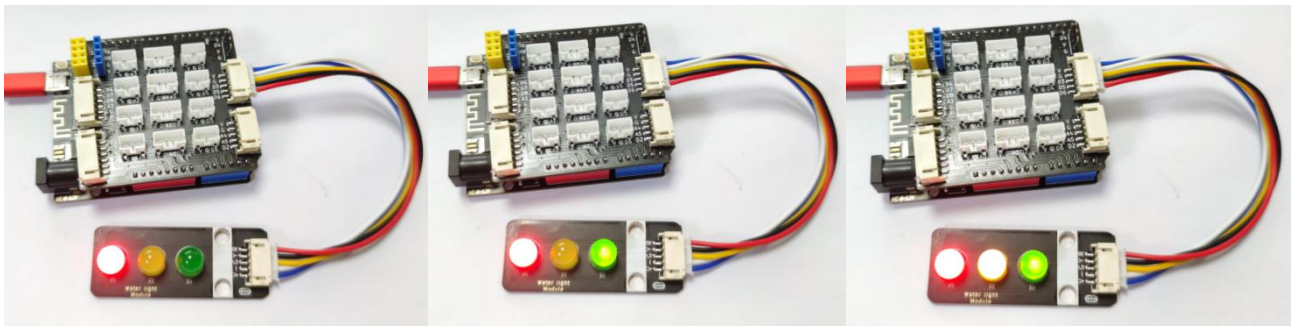
Experimental Conclusion

After the device is wired, the above program is burned to BLE-UNO board, and the traffic lights will turn on and off in turn.



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