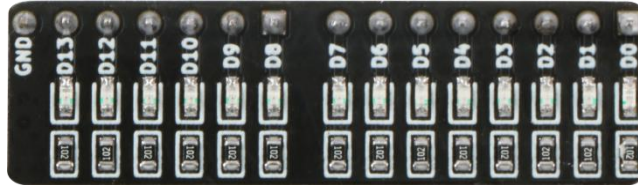# Water Lamp Experiment

Module Introduction

PCB water lamp module has 14 LED lights. The module is compatible with arduino UNO R3 board and can be directly inserted into the terminal socket of uno main board without wiring. The LED lamp of the module is connected by common cathode.
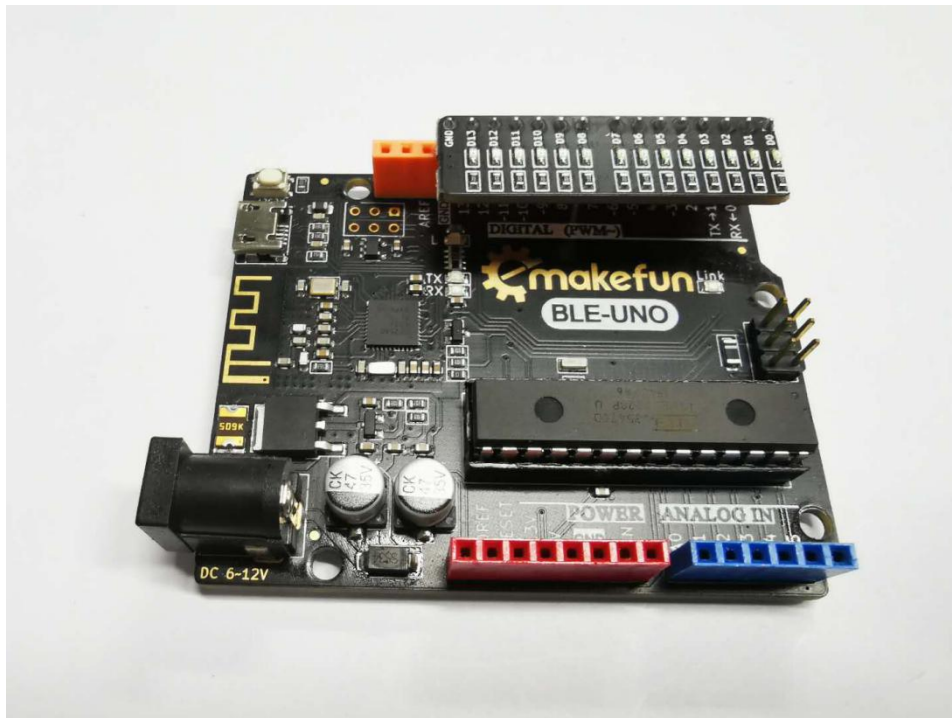

Purpose of the Experiment

Learn how to use Arduino development board to control LED module and make LED lamp cycle lighting.

Device List

- BLE-UNO Main Board: 1
- Expansion Board :1
- USB Data Wire: 1
- PCB Water Lamp Mould:1

Physical Wiring Diagram

Program Code

```
void setup()
{
    pinMode(0, OUTPUT);        //Set the LED port to output mode
    digitalWrite(0, LOW);      // Set the LED port to low level by default
    pinMode(1, OUTPUT);
    digitalWrite(1, LOW);
    pinMode(2, OUTPUT);
    digitalWrite(2, LOW);
    pinMode(3, OUTPUT);
    digitalWrite(3, LOW);
    pinMode(4, OUTPUT);
    digitalWrite(4, LOW);
    pinMode(5, OUTPUT);
    digitalWrite(5, LOW);
    pinMode(6, OUTPUT);
    digitalWrite(6, LOW);
    pinMode(7, OUTPUT);
    digitalWrite(7, LOW);
    pinMode(8, OUTPUT);
    digitalWrite(8, LOW);
    pinMode(9, OUTPUT);
```

```
        digitalWrite(9, LOW);
        pinMode(10, OUTPUT);
        digitalWrite(5, LOW);
        pinMode(11, OUTPUT);
        digitalWrite(11, LOW);
        pinMode(12, OUTPUT);
        digitalWrite(12, LOW);
        pinMode(13, OUTPUT);
        digitalWrite(13, LOW);
        pinMode(14, OUTPUT);
        digitalWrite(14, LOW);


}

void loop() {
        digitalWrite(1, HIGH);     // Set the LED port to high level by default
        delay(500); //500 ms delay
        digitalWrite(1, LOW);
        delay(500);
        digitalWrite(2, HIGH);
        delay(500);
        digitalWrite(2, LOW);
        delay(500);
        digitalWrite(3, HIGH);
        delay(500);
        digitalWrite(3, LOW);
        delay(500);
        digitalWrite(4, HIGH);
        delay(500);
        digitalWrite(4, LOW);
        delay(500);
        digitalWrite(5, HIGH);
        delay(500);
        digitalWrite(5, LOW);
        delay(500);
        digitalWrite(6, HIGH);
        delay(500);
        digitalWrite(6, LOW);
        delay(500);
        digitalWrite(7, HIGH);
```

```
    delay(500);
    digitalWrite(7, LOW);
    delay(500);
    digitalWrite(8, HIGH);
    delay(500);
    digitalWrite(8, LOW);
    delay(500);
    digitalWrite(9, HIGH);
    delay(500);
    digitalWrite(9, LOW);
    delay(500);
    digitalWrite(10, HIGH);
    delay(500);
    digitalWrite(10, LOW);
    delay(500);
    digitalWrite(11, HIGH);
    delay(500);
    digitalWrite(11, LOW);
    delay(500);
    digitalWrite(12, HIGH);
    delay(500);
    digitalWrite(12, LOW);
    delay(500);
    digitalWrite(13, HIGH);
    delay(500);
    digitalWrite(13, LOW);
    delay(500);
    digitalWrite(14, HIGH);
    delay(500);
    digitalWrite(14, LOW);
    delay(500);
}
```

MagicBlock Graphical Programming Program

Mixly Graphical Programming Program