

# IOT Lab - 5th Sem

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Program No : 14 , Week : 7

Program Title : LCD

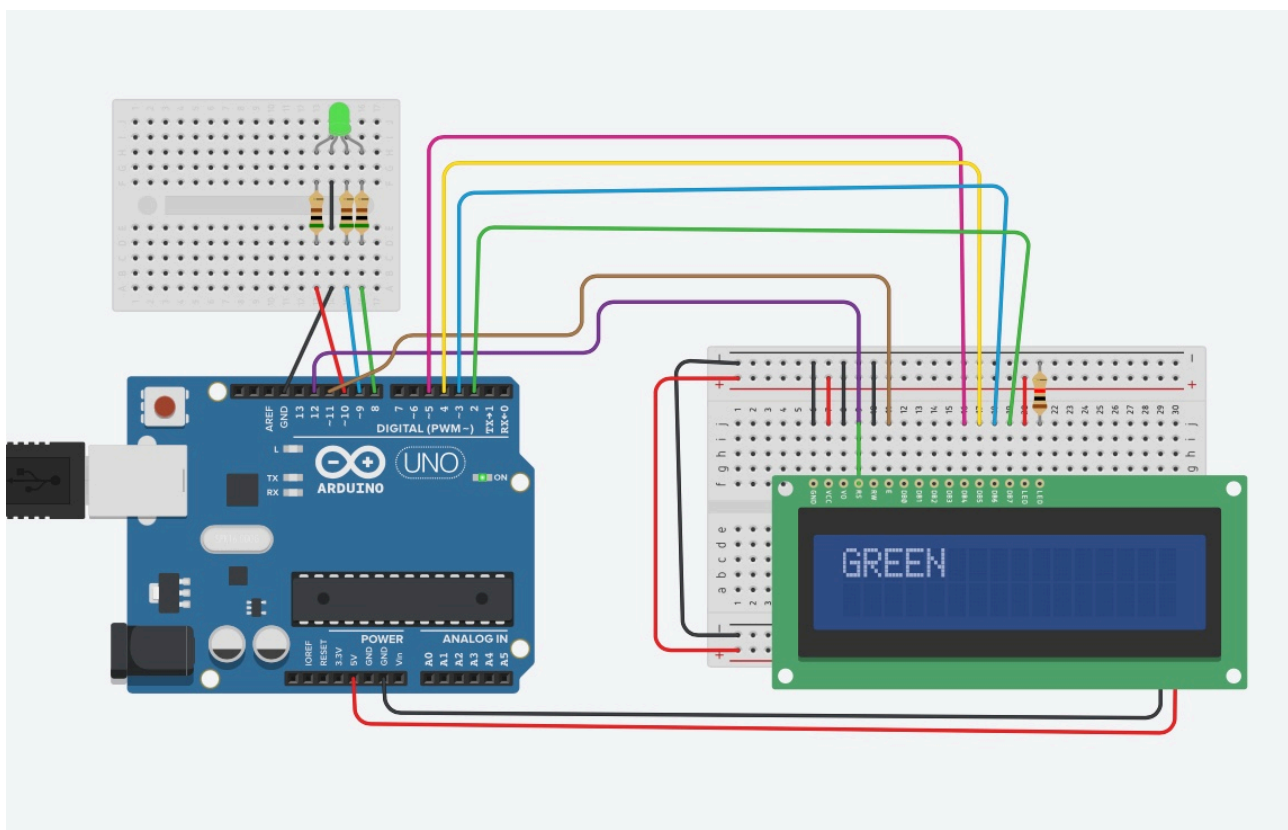
**Aim :**

To switch colours using a RGB led and display the current colour in the LCD display using an Arduino Uno board

## Hardware Required :

- Arduino Uno Board
- RGB LED
- LCD Panel
- 4 X 240 Ohm Resistor

## Circuit Diagram :



## Written Code :

Rajath.M.K  
IBM 18CS079

```
#include <LiquidCrystal.h>
LiquidCrystal lcd(
    (12, 11, 5, 4, 3, 2);

5
int red = 10
int green = 8
int blue = 9

10 void setup() {
    pinMode(red, OUTPUT);
    pinMode(green, OUTPUT);
    pinMode(blue, OUTPUT);
}

15 void loop() {
    lcd.setCursor(0,0);

    RGB_color(255, 0, 0);
    lcd.print("RED");
    delay(1000);
    lcd.clear();

    RGB_color(0, 255, 0);
    lcd.print("Green");
    delay(1000);
    lcd.clear();

    RGB_color(0, 0, 255);
    lcd.print("Blue");
    delay(1000);
    lcd.clear();

30 }
```

```
void RGB_color(int redV, int greenV, int blueV)
{
    analogWrite(red, redV);
    analogWrite(green, greenV);
    analogWrite(blue, blueV);
}
```

## Observation / Output :

The LED turns from Red – Blue – Green and the name of the current colour is displayed on the LCD.