

# **IOT LAB - 5th Sem**

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**Program No : 15**

**Program Title : RGB LED interfacing with LCD panel**

**Aim :**

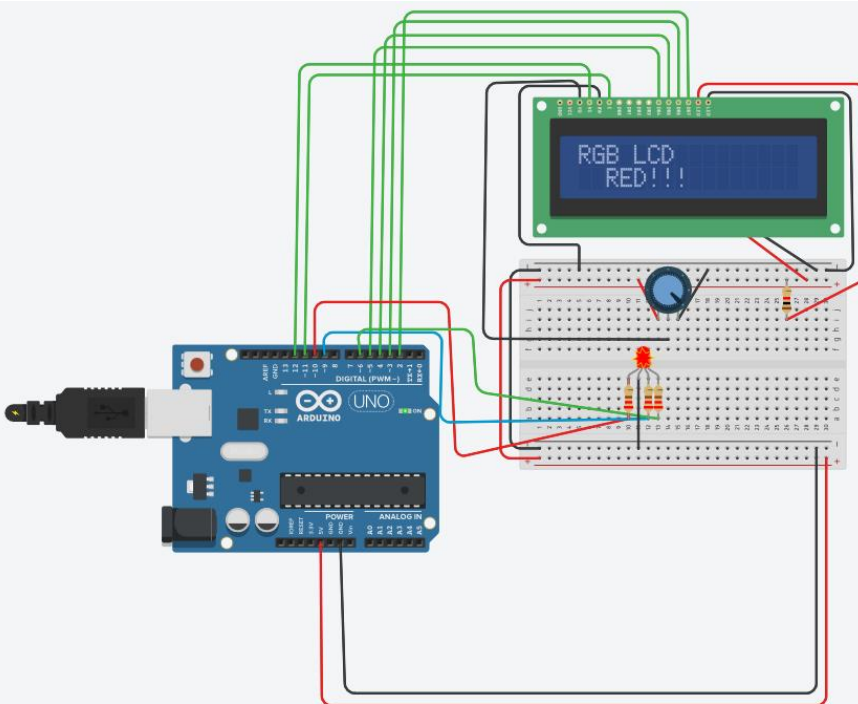
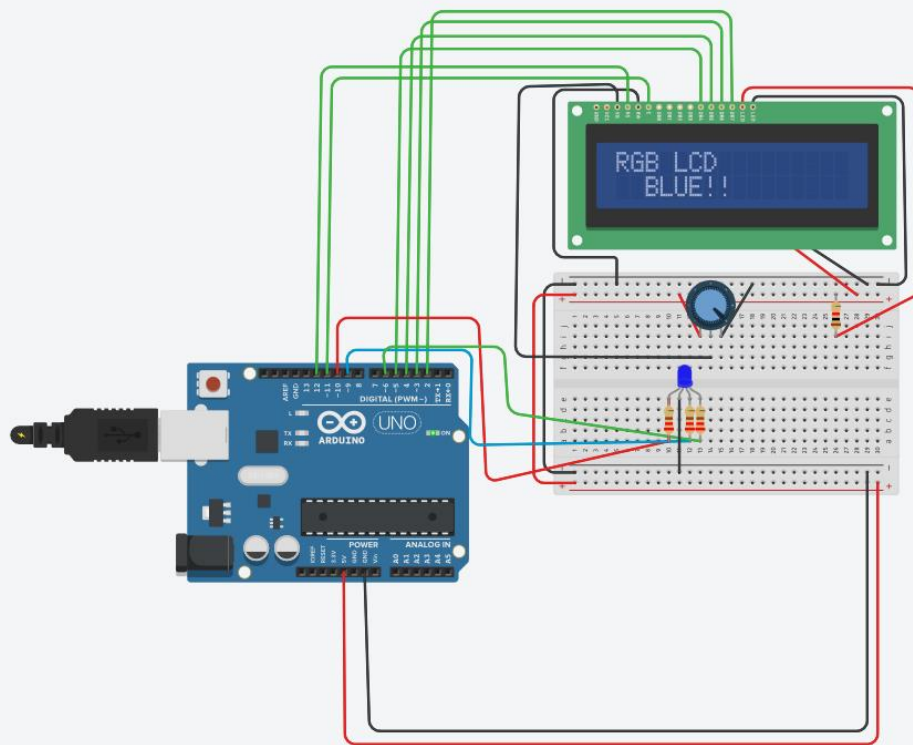
To switch colours using a RGB led and display the current colour in the LCD display using an Arduino Uno board.

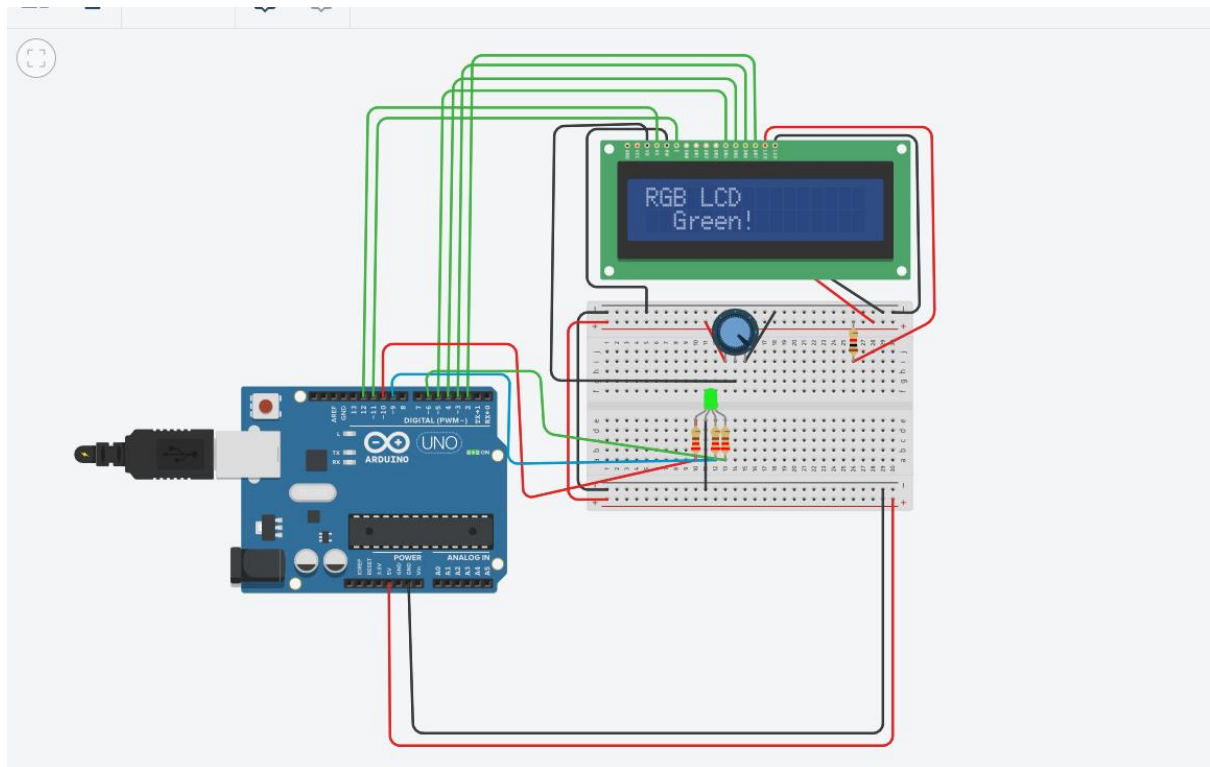
**Hardware Required :**

- Arduino Uno Board
  - RGB LED
  - LCD Panel
  - 4 X 240 Ohm Resistor
- Circuit Diagram :**



Simulator time: 00:00:24





**Written Code :**

```

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

void setup ()
{
  pinMode (8, OUTPUT);
  pinMode (9, OUTPUT);
  pinMode (10, OUTPUT);

  lcd.begin (16, 2);
  lcd.print ("RGB-check");
}

void loop ()
{
  lcd.setCursor (0, 1);
  lcd.print ("Red ");
  digitalWrite (10, HIGH);
  digitalWrite (9, LOW);
  digitalWrite (8, LOW);
  delay (500);
  lcd.setCursor (0, 1);
  lcd.print ("Blue ");
  digitalWrite (10, LOW);
  digitalWrite (9, HIGH);
  digitalWrite (8, LOW);
  delay (500);
  lcd.setCursor (0, 1);
  lcd.print ("Green ");
  digitalWrite (10, LOW);
  digitalWrite (9, LOW);
  digitalWrite (8, HIGH);
  delay (500);
}

```

### Observation /Output :

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