Name – Shreya Laddha

Program No. – 14

Program Title – **RGB Led and LCD**

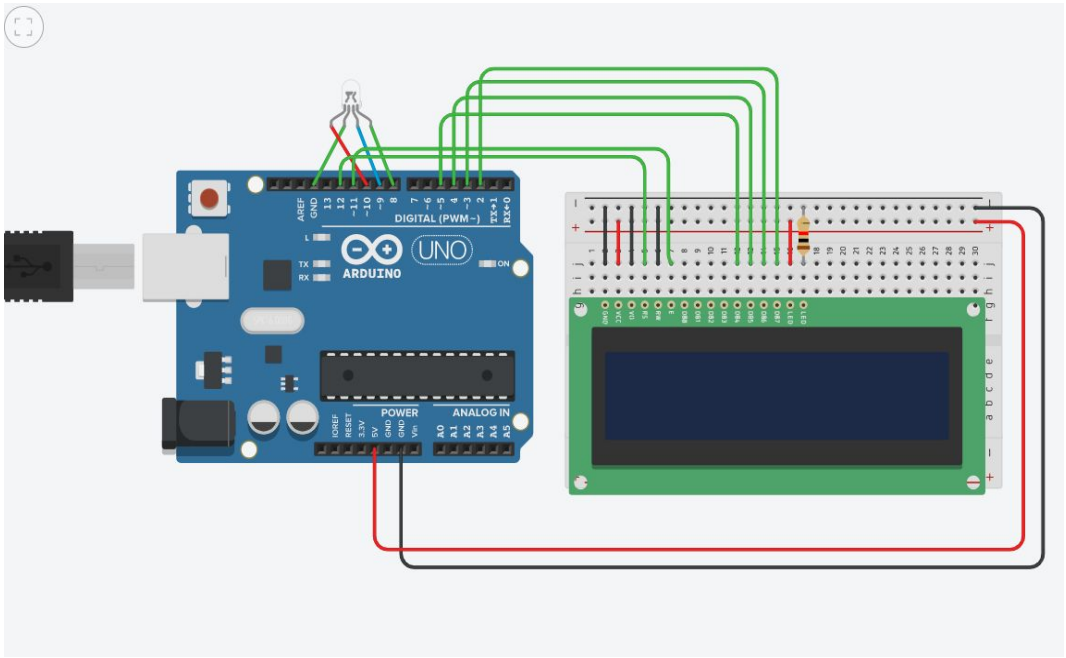
AIM

Design a display system to print the RED,BLUE and Green colors (RGB Led and LCD).

HARDWARES REQUIRED

- Arduino Board
- Breadboard Small
- LCD 16x2
- RGB LED
- Resistor

CIRCUIT DIAGRAM



WRITE-UP

PFA

CODE

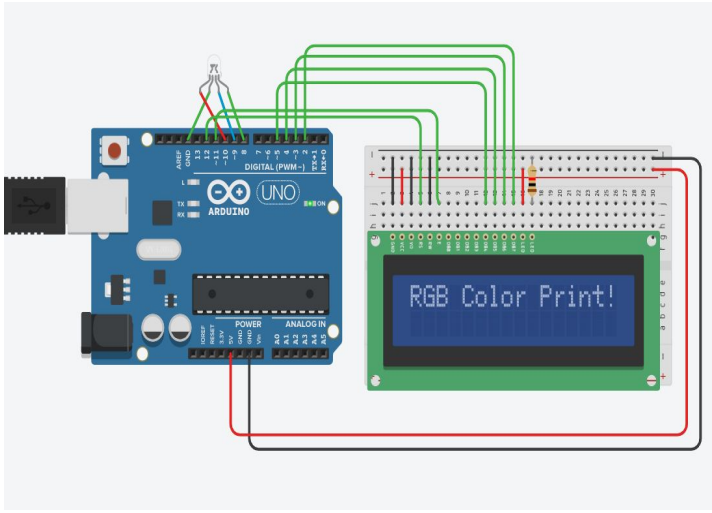
```
#include <LiquidCrystal.h>
LiquidCrystal lcd(12,11,5,4,3,2);

int red=10;
int green=8;
int blue=9;
void setup()
{
  pinMode(10, OUTPUT);
  pinMode(9, OUTPUT);
  pinMode(8, OUTPUT);
}

void loop()
{
  lcd.setCursor(0,0);
  lcd.print("RGB Color Print!");
  delay(1000);
  lcd.clear();
```

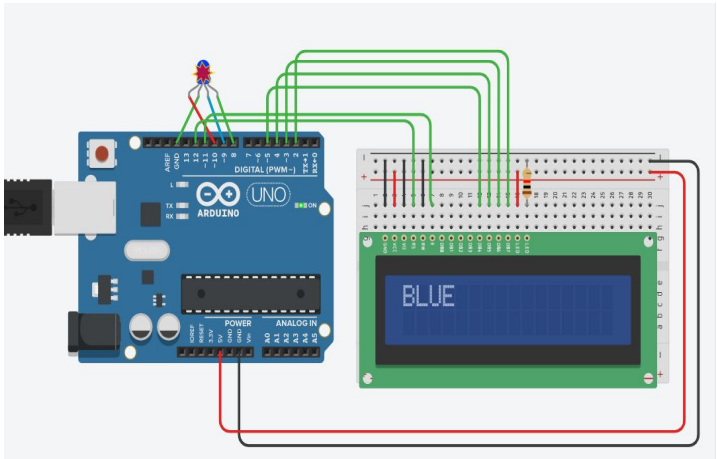
```
  RGB_color(255,0,0);//red
  lcd.print("RED");
  delay(1000);
  lcd.clear();

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

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

  RGB_color(0,0,0);//White
  lcd.print("WHITE");
  delay(1000);
  lcd.clear();
}

void RGB_color(int red_value, int green_value, int blue_value)
```

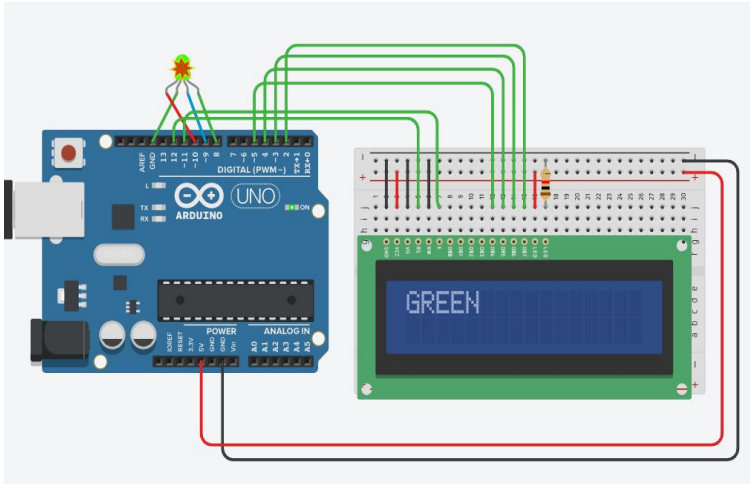
```
{
  analogWrite(red,red_value);
  analogWrite(green,green_value);
  analogWrite(blue,blue_value);
}
```

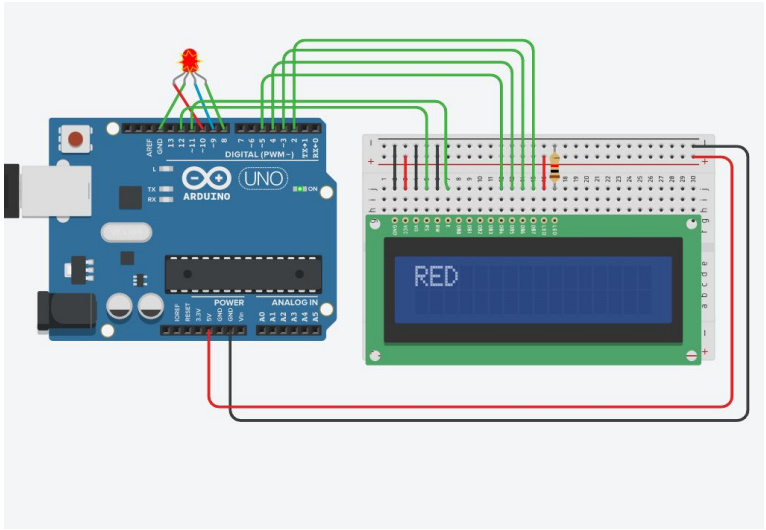
OUTPUT

Designed a display system to print the RED,BLUE and Green colors (RGB Led and LCD).






GREEN
UNO
ARDUINO
DIGITAL (PWM~)
POWER
ANALOG IN


RED
UNO
ARDUINO
DIGITAL (PWM~)
POWER
ANALOG IN