Name J S MEGHANA

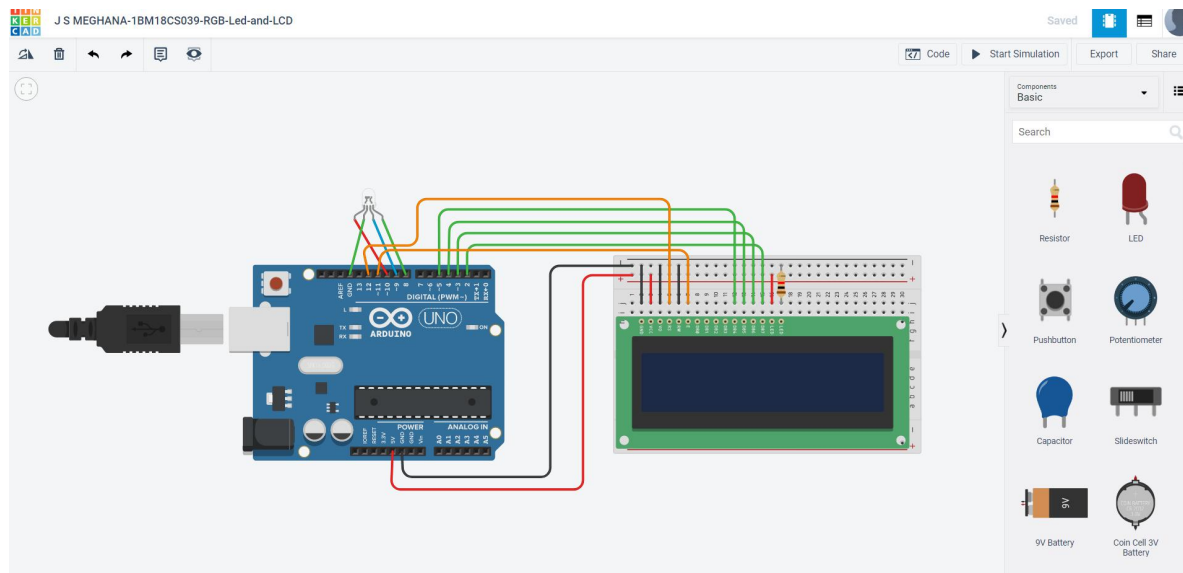**USN** 1BM18CS039

Program no Week-7(1st-Question)

Program Title System to Print Red, Blue, Green colours

Aim: Design a display system to print Red, Blue and Green colors(RGB and LCD).

Hardware Required

1. Arduino Board
2. Bread Board
3. LCD
4. RGB LED
5. Resistor

Circuit Diagram

Code:

```
#include <LiquidCrystal.h>
#define red 10
#define green 8
#define blue 9
LiquidCrystal lcd(12, 11, 5, 4, 3, 2);
void setup()
{
lcd.begin(16,2);
lcd.setCursor(6,0);
pinMode(red, OUTPUT);
pinMode(green, OUTPUT);
pinMode(blue, OUTPUT);
}
void loop()
```
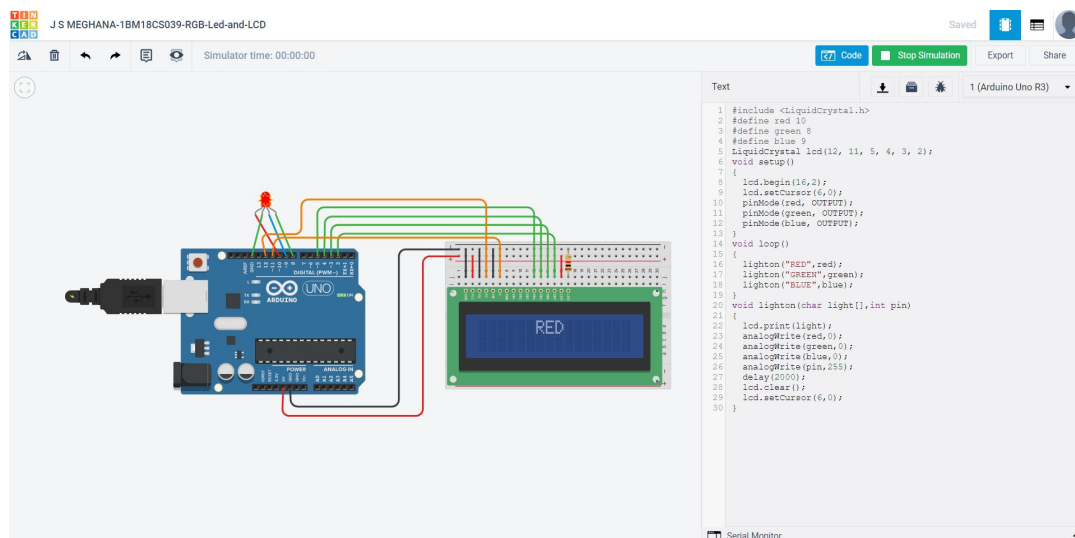
```
{
lighton("RED",red);
lighton("GREEN",green);
lighton("BLUE",blue);
}
void lighton(char light[],int pin)
{
lcd.print(light);
analogWrite(red,0);
analogWrite(green,0);
analogWrite(blue,0);
analogWrite(pin,255);
delay(2000);
lcd.clear();
lcd.setCursor(6,0);
}
```
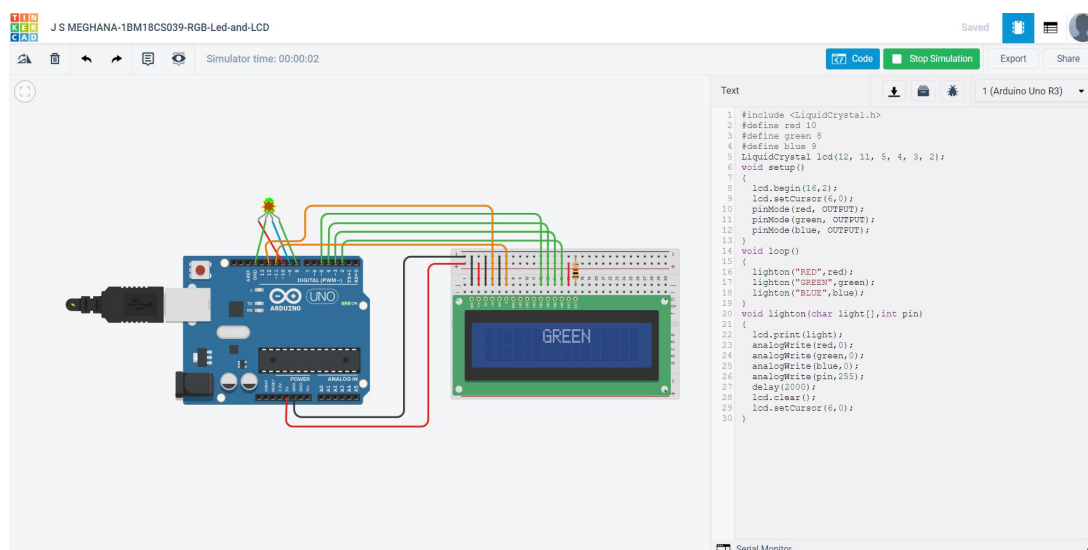
Observation /Output:
Output-1:

Output-2:

Output-3:

Simulator time: 00:00:04   Code   Stop Simulation   Export   Share

Text   1 (Arduino Uno R3)

```
1  #include <LiquidCrystal.h>
2  #define red 10
3  #define green 8
4  #define blue 9
5  LiquidCrystal lcd(12, 11, 5, 4, 3, 2);
6  void setup()
7  {
8    lcd.begin(16,2);
9    lcd.setCursor(6,0);
10   pinMode(red, OUTPUT);
11   pinMode(green, OUTPUT);
12   pinMode(blue, OUTPUT);
13 }
14 void loop()
15 {
16   lighton("RED",red);
17   lighton("GREEN",green);
18   lighton("BLUE",blue);
19 }
20 void lighton(char light[],int pin)
21 {
22   lcd.print(light);
23   analogWrite(red,0);
24   analogWrite(green,0);
25   analogWrite(blue,0);
26   analogWrite(pin,255);
27   delay(2000);
28   lcd.clear();
29   lcd.setCursor(6,0);
30 }
```

Serial Monitor