***NAME:*** *MUHAMMAD UMAIR HASAN*

***STUDENT ID:*** *63555*

***CLASS ID:*** *104486*

***COURSE:*** *COMPUTER ARCHITECTURE* ***(LAB)***

***TASK #:*** *12*

***SUBMITTED TO:*** *SIR ABUZAR ZAFAR*

***CODE:***

*int red1= 13;*

*int green1 = 12;*

*int blue1 = 11;*

*int red2= 10;*

*int green2 = 9;*

*int blue2 = 8;*

*const int buzzer = 5;*

*void setup() {*

*pinMode(red1, OUTPUT);*

*pinMode(green1, OUTPUT);*

*pinMode(blue1, OUTPUT);*

*pinMode(red2, OUTPUT);*

*pinMode(green2, OUTPUT);*

*pinMode(blue2, OUTPUT);*

*pinMode(buzzer, OUTPUT);*

*}*

*void loop() {*

*RGB\_color1(255, 0, 0); // Red*

*tone(buzzer,1000);*

*RGB\_color2(255, 255, 255); // White*

*tone(buzzer,300);*

*delay(1000);*

*RGB\_color1(0, 255, 0); // Green*

*tone(buzzer,900);*

*RGB\_color2(255, 255, 0); // Yellow*

*tone(buzzer,400);*

*delay(1000);*

*RGB\_color1(0, 0, 255); // Blue*

*tone(buzzer,800);*

*RGB\_color2(255, 0, 255); // Magenta*

*tone(buzzer,500);*

*delay(1000);*

*RGB\_color1(255, 255, 125); // Raspberry*

*tone(buzzer,700);*

*RGB\_color2(0, 255, 255); // Cyan*

*tone(buzzer,600);*

*delay(1000);*

*RGB\_color1(0, 255, 255); // Cyan*

*tone(buzzer,600);*

*RGB\_color2(255, 255, 125); // Raspberry*

*tone(buzzer,700);*

*delay(1000);*

*RGB\_color1(255, 0, 255); // Magenta*

*tone(buzzer,500);*

*RGB\_color2(0, 0, 255); // Blue*

*tone(buzzer,800);*

*delay(1000);*

*RGB\_color1(255, 255, 0); // Yellow*

*tone(buzzer,400);*

*RGB\_color2(0, 255, 0); // Green*

*tone(buzzer,900);*

*delay(1000);*

*RGB\_color1(255, 255, 255); // White*

*tone(buzzer,300);*

*RGB\_color2(255, 0, 0); // Red*

*tone(buzzer,1000);*

*delay(1000);*

*}*

*void RGB\_color1(int red\_light\_value, int green\_light\_value, int blue\_light\_value)*

*{*

*analogWrite(red1, red\_light\_value);*

*analogWrite(green1, green\_light\_value);*

*analogWrite(blue1, blue\_light\_value);*

*}*

*void RGB\_color2(int red\_light\_value, int green\_light\_value, int blue\_light\_value)*

*{*

*analogWrite(red2, red\_light\_value);*

*analogWrite(green2, green\_light\_value);*

*analogWrite(blue2, blue\_light\_value);*

*}*

***ANSWER # 1:***

* *In NO coil is non-energized.*
* *In NC coil is energized.*