

Name: Shabbir Ezzy

Roll No: 10

Batch: S1

Practical No:6

AIM: Create a program that illuminates the green LED if the counter is less than 100, illuminates the yellow LED if the counter is between 101 and 200 and illuminates the red LED if the counter is greater than 200.

CODE:

```
int counter;
void setup(){

    Serial.begin(9600);

    pinMode(11,OUTPUT);

    pinMode(12,OUTPUT);

    pinMode(13,OUTPUT);

}
void loop(){

    if(counter=300)
    {
        counter=0;
    }

    if(counter>0&&counter<100)
    {

        digitalWrite(11,HIGH);
```

```
        digitalWrite(13,LOW);

        digitalWrite(12,LOW);
    }

    if(counter>101&&counter<200)
    {
        digitalWrite(12, HIGH);

        digitalWrite(11,LOW);

        digitalWrite(13, LOW);
    }

    if(counter>200&&counter<300)

    {

        digitalWrite(13,HIGH)

        ;

        digitalWrite(11,LOW);

        digitalWrite(12,LOW);

    }

    counter = counter+10,

    delay(500);

    Serial.println(counter);

}
```

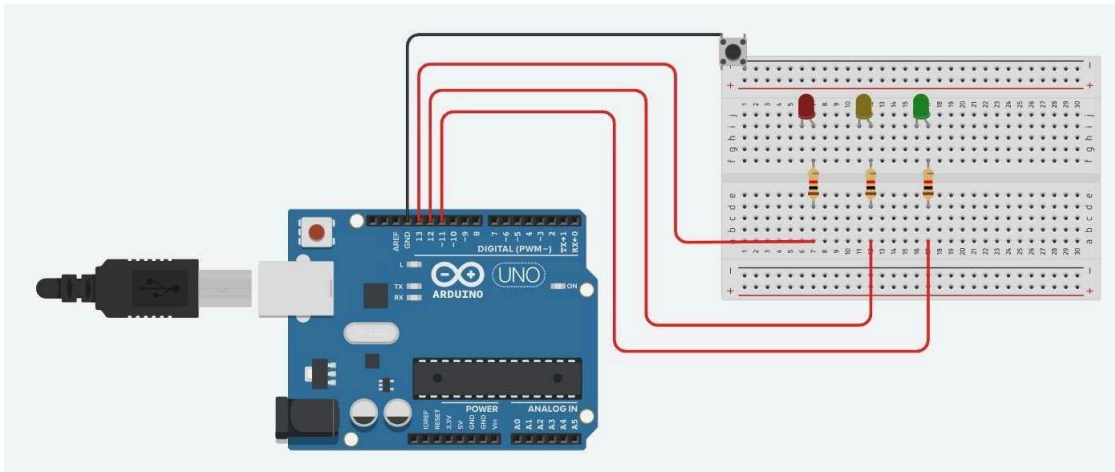
Output:

Step 01: Select the Arduino board.

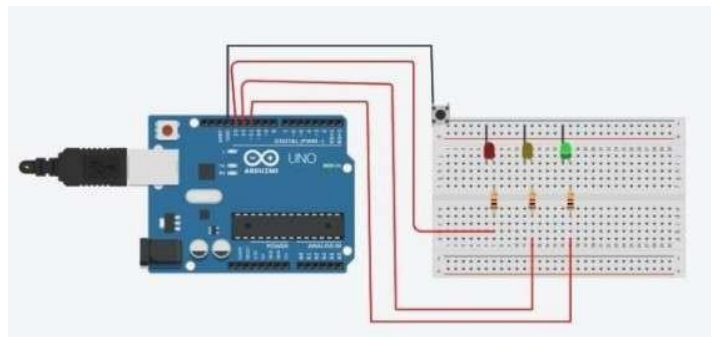
Step 02: Select the bread board.

Step 03: Connect the +ve terminal of the RED LED along with Resistor (2200) to the Arduino's Pin 13, Connect the +ve terminal of the YELLOW LED along with Resistor (2200) to the Arduino's Pin 12, Connect the ve terminal of the GREEN LED along with Resistor (2200) to the Arduino's Pin 11.

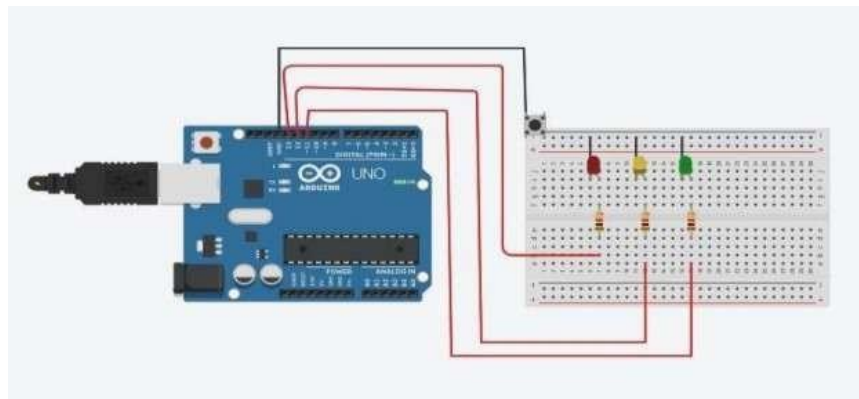
Step 04: Connect every LED's-ve terminal to the ve lane of the Breadboard, Connect to Terminal 2a of the Pushbutton to it then Connect this common-ve end to the GND pin of the Arduino Uno via Push Buttons Terminal 2b as follows



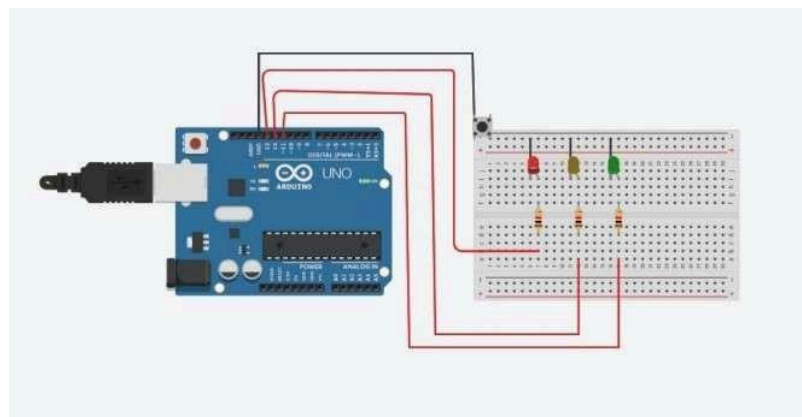
Step 05: Start the Simulation, While Pressing the Pushbutton, the counter starts with 0 and while it is less than 100 the GREEN LED illuminates.



Step 06: While Pressing the Pushbutton, when the counter is between 101 and 200 the YELLOW LED illuminates.



Step 07: While Pressing the Pushbutton, when the counter is between 201 and 300 the RED LED illuminates



Step 08: Circuit Diagram

