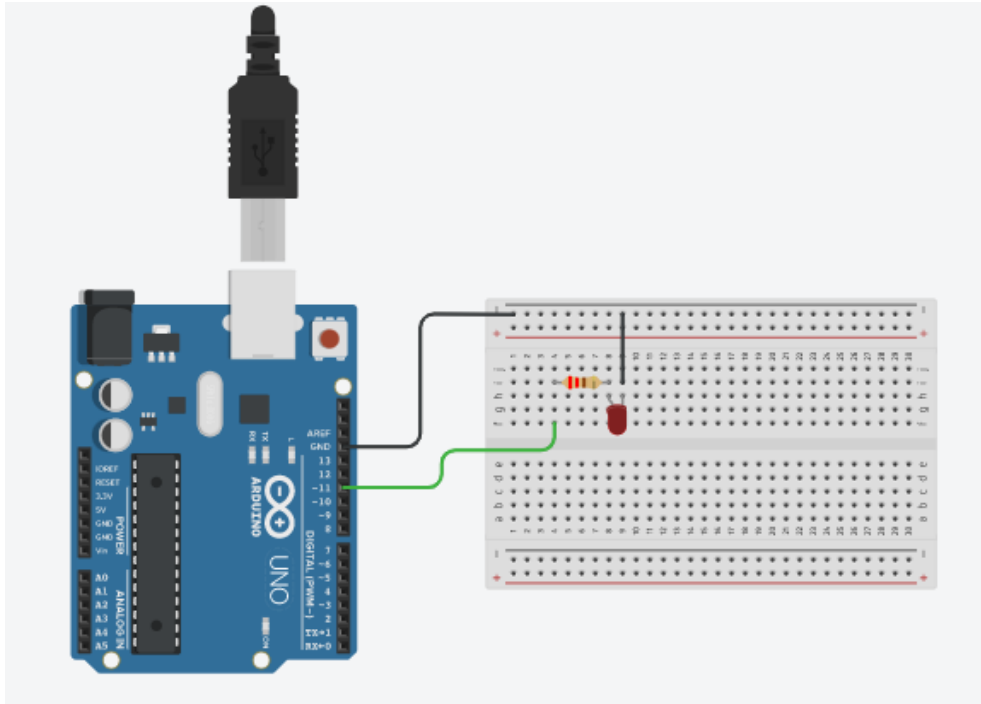


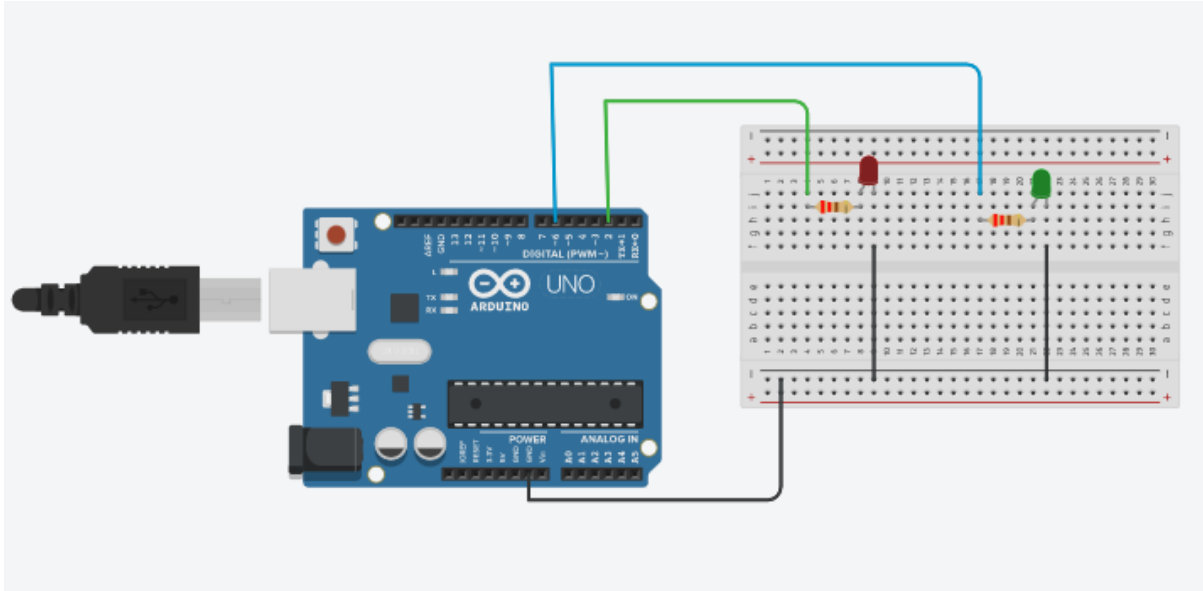
1.LED



```
void setup()
{
  pinMode(11, OUTPUT);
}
```

```
void loop()
{
  digitalWrite(11, HIGH);
  delay(1000); // Wait for 1000 millisecond(s)
  digitalWrite(11, LOW);
  delay(1000); // Wait for 1000 millisecond(s)
}
```

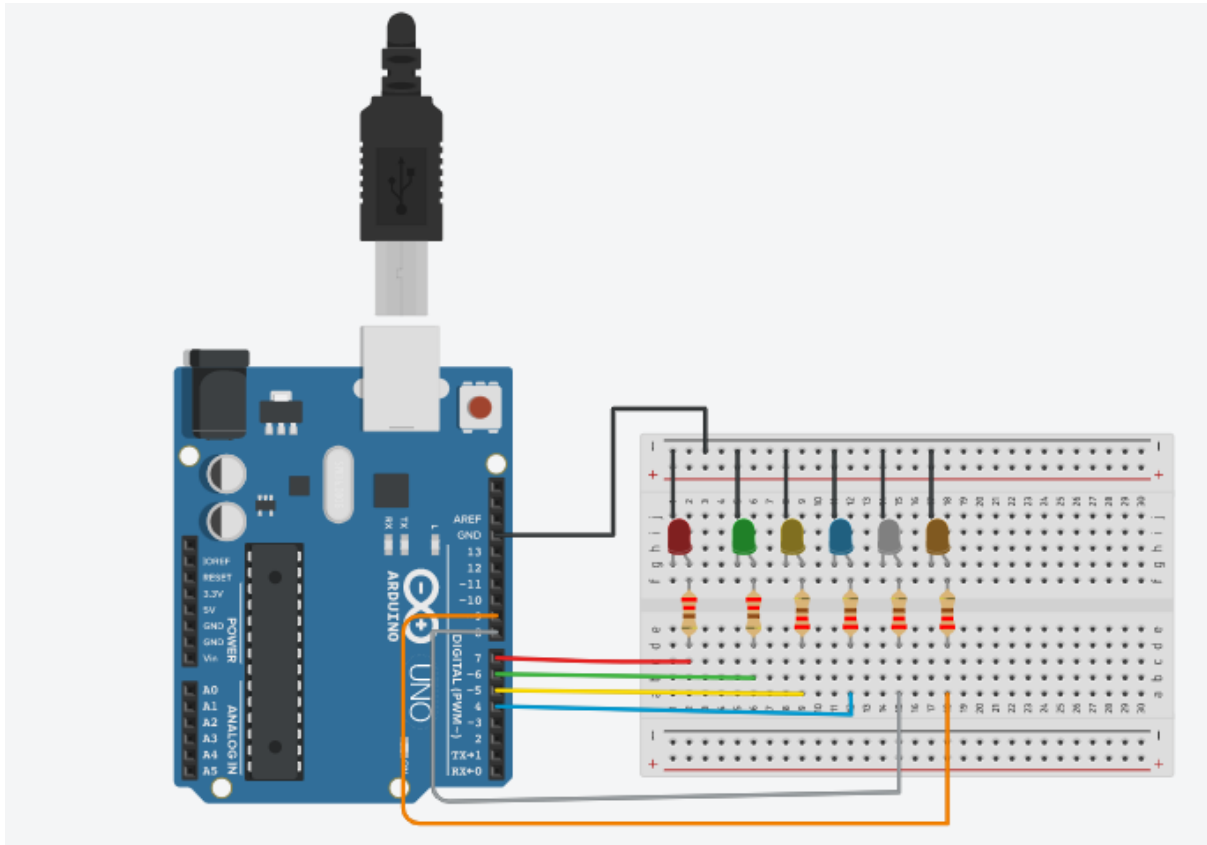
2.Alternate blinking of LEDS



```
void setup()
{
  pinMode(2, OUTPUT);
  pinMode(6, OUTPUT);
}

void loop()
{
  digitalWrite(2, HIGH);
  digitalWrite(6, LOW);
  delay(1000); // Wait for 1000 millisecond(s)
  digitalWrite(2, LOW);
  digitalWrite(6, HIGH);
  delay(1000); // Wait for 1000 millisecond(s)
}
```

3.Forward blink of LEDS



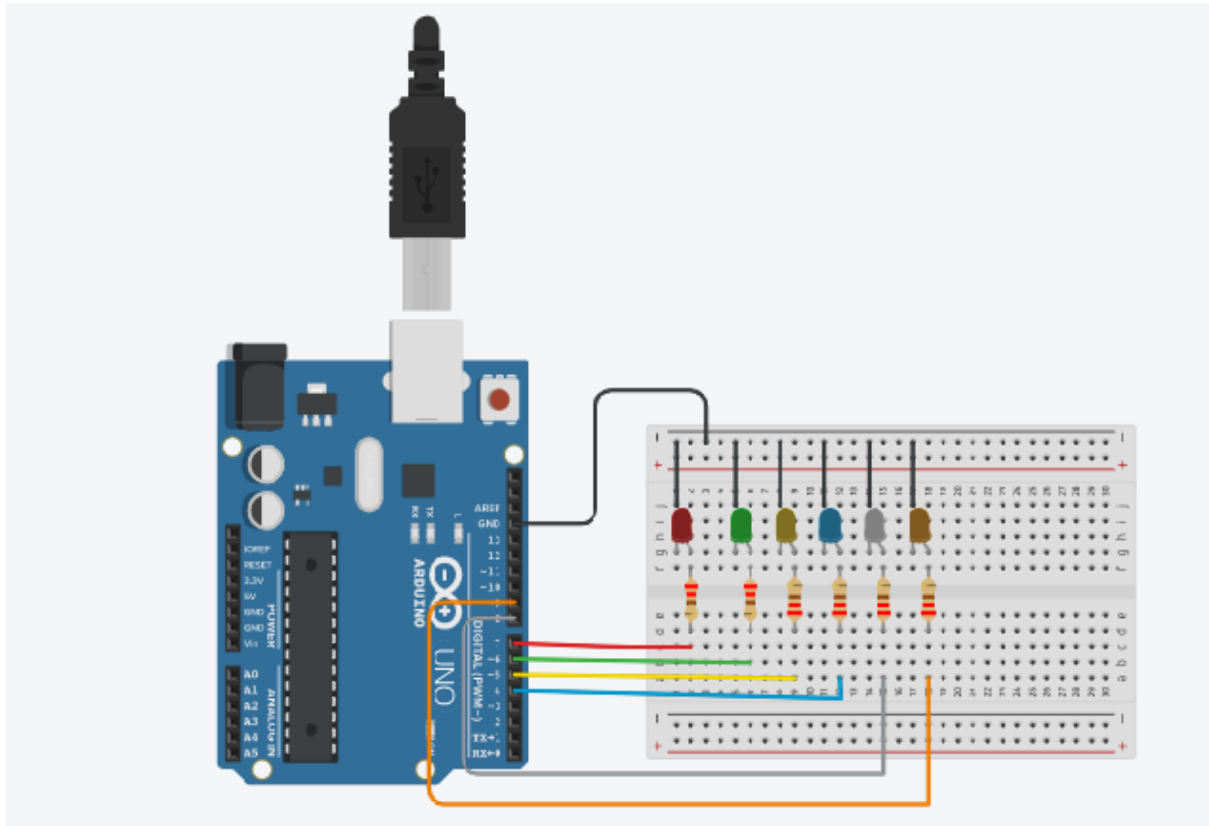
```
void setup()
{
  pinMode(7, OUTPUT);
  pinMode(6, OUTPUT);
  pinMode(5, OUTPUT);
  pinMode(4, OUTPUT);
  pinMode(8, OUTPUT);
  pinMode(9, OUTPUT);
}
```

```
void loop()
{
    digitalWrite(7,HIGH);

    delay(100);
    digitalWrite(6,HIGH);
    digitalWrite(7,LOW);
    delay(100);
    digitalWrite(5,HIGH);
    digitalWrite(6,LOW);
    delay(100);
    digitalWrite(4,HIGH);
    digitalWrite(5,LOW);
    delay(100);
    digitalWrite(8,HIGH);
    digitalWrite(5,LOW);
    delay(100);
    digitalWrite(9,HIGH);
    digitalWrite(8,LOW);
    delay(100);
    digitalWrite(9,LOW);
    digitalWrite(8,HIGH);
    delay(100);

}
```

4. Forward -Reverse blinking of LEDS



```
void setup()
{
  pinMode(7, OUTPUT);
  pinMode(6, OUTPUT);
  pinMode(5, OUTPUT);
  pinMode(4, OUTPUT);
  pinMode(8, OUTPUT);
  pinMode(9, OUTPUT);
}
```

```
void loop()
{
```

```
digitalWrite(7,HIGH);
```

```
delay(100);
```

```
digitalWrite(6,HIGH);
```

```
digitalWrite(7,LOW);
```

```
delay(100);
```

```
digitalWrite(5,HIGH);
```

```
digitalWrite(6,LOW);
```

```
delay(100);
```

```
digitalWrite(4,HIGH);
```

```
digitalWrite(5,LOW);
```

```
delay(100);
```

```
digitalWrite(8,HIGH);
```

```
digitalWrite(5,LOW);
```

```
delay(100);
```

```
digitalWrite(9,HIGH);
```

```
digitalWrite(8,LOW);
```

```
delay(100);
```

```
digitalWrite(9,LOW);
```

```
digitalWrite(8,HIGH);
```

```
delay(100);
```

```
digitalWrite(8,LOW);
```

```
digitalWrite(4,HIGH);
```

```
delay(100);
```

```
digitalWrite(4,LOW);
```

```
digitalWrite(5,HIGH);
```

```
delay(100);
```

```
digitalWrite(5,LOW);
```

```
digitalWrite(6,HIGH);
```

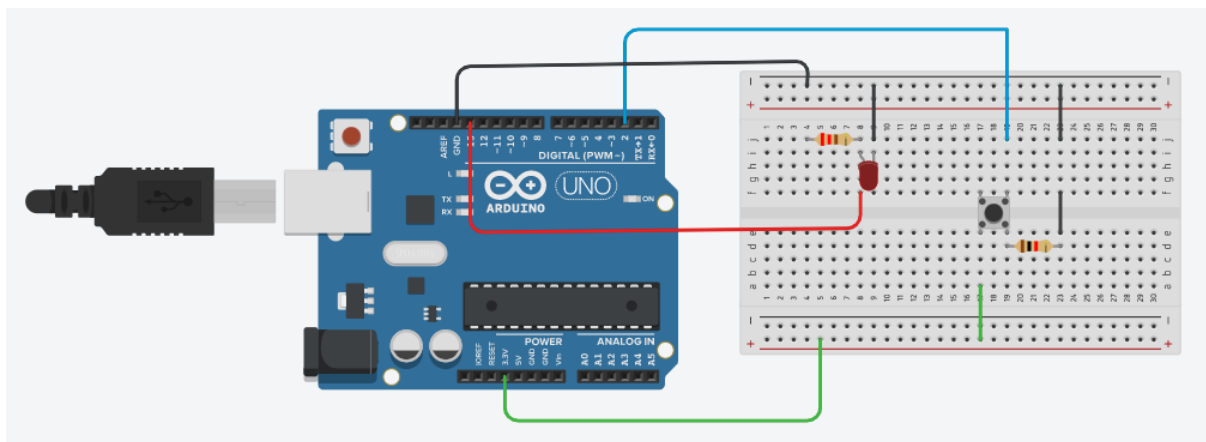
```
delay(100);
```

```

digitalWrite(6,LOW);
digitalWrite(7,HIGH);
delay(100);
digitalWrite(7,LOW);
delay(100);
}

```

5.Blink of LED using pushbutton



```

int led=13;
int pushbutton=2;
void setup()
{
  Serial.begin(9600);
  pinMode(pushbutton,INPUT);
  pinMode(led,OUTPUT);
}

void loop()
{
  int buttonState=digitalRead(pushbutton);
  Serial.println(buttonState);
}

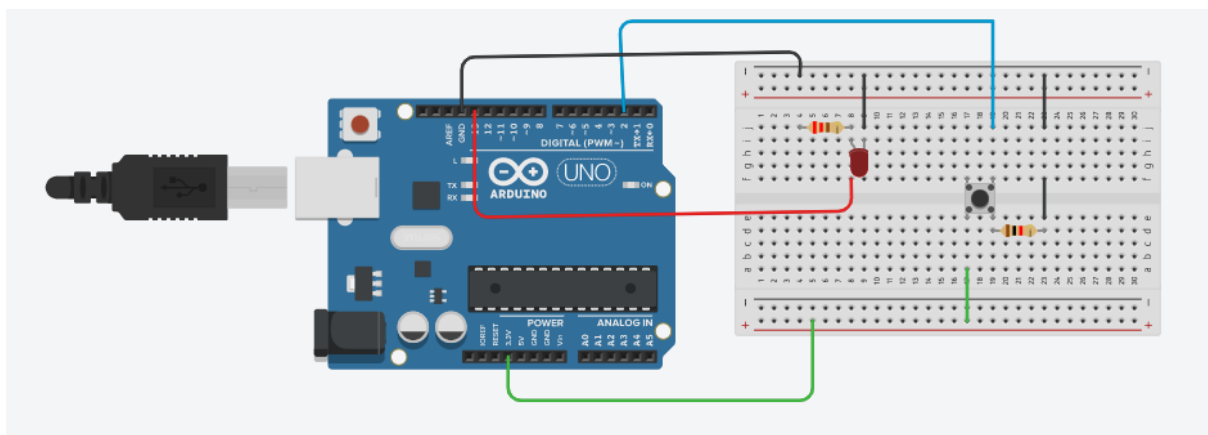
```

```

if(buttonState ==HIGH)
{
    digitalWrite(led,HIGH);
}
else
{
    digitalWrite(led,LOW);
}
delay(100);
}

```

6.Changing the state of LED using pushbutton



```

int pinButton=2;
int LED=13;
int stateLED= LOW;
int stateButton;
int previous = LOW;
long time=0;
long debounce = 200;
void setup()

```



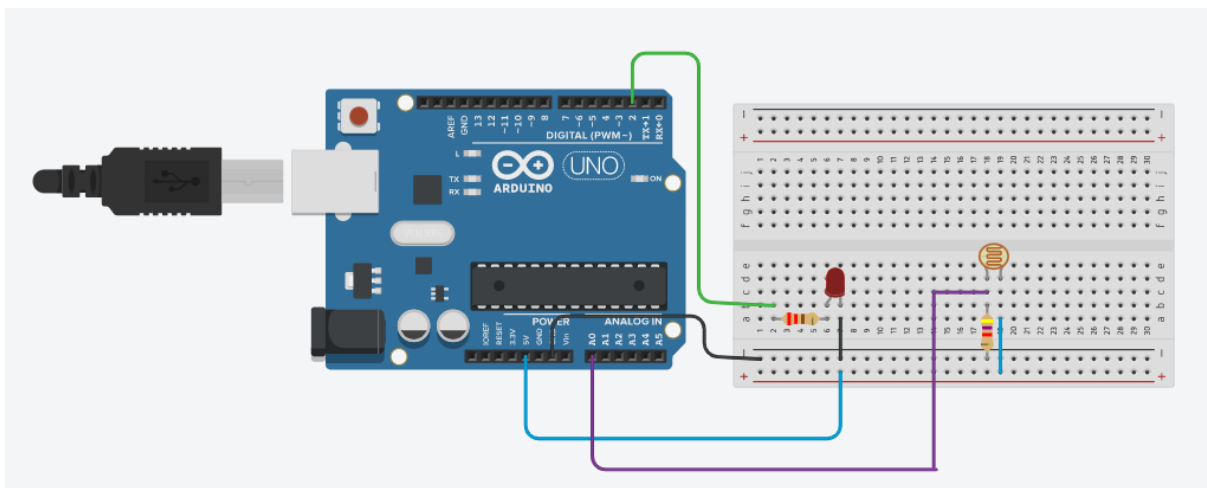
```

{
pinMode(pinButton, INPUT);
pinMode(LED, OUTPUT);
}

void loop()
{
stateButton = digitalRead(pinButton);
if(stateButton == HIGH && previous == LOW && millis() - time > debounce){
    if(stateLED == HIGH){
        stateLED = LOW;
    }
    else{
        stateLED = HIGH;
    }
    time = millis();
}
digitalWrite(LED, stateLED);
previous == stateButton;
}

```

7.Changing the LED state using photoresistor



```

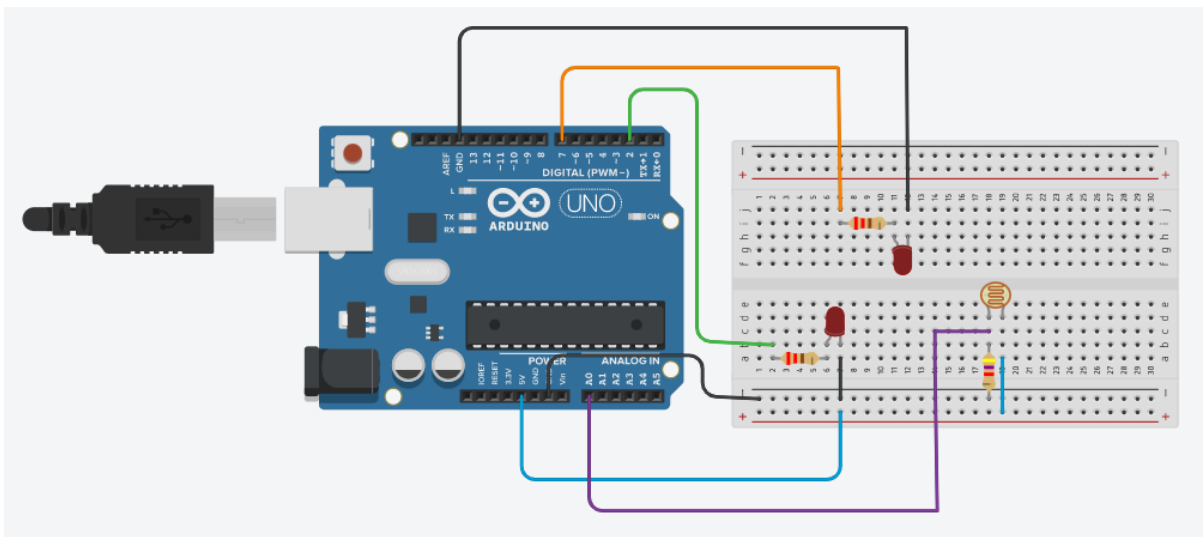
int sensorValue =0;

void setup()
{
  pinMode(A0, INPUT);
  Serial.begin(9600);
  pinMode(2, OUTPUT);
}

void loop()
{
  sensorValue = analogRead(A0);
  Serial.println(sensorValue);
  if(sensorValue>829)
    digitalWrite(2,LOW);
  else
  {
    digitalWrite(2,HIGH);
  }
}

```

8.Changing the states of LEDS using photoresistor



```
int sensorValue =0;

void setup()
{
  pinMode(A0, INPUT);
  Serial.begin(9600);
  pinMode(2, OUTPUT);
  pinMode(7,OUTPUT);
}

void loop()
{
  sensorValue = analogRead(A0);
  Serial.println(sensorValue);
  if(sensorValue<852)
  {
    digitalWrite(2,HIGH);
    digitalWrite(7,HIGH);
  }

  else if(sensorValue<900)
  {
    digitalWrite(2,HIGH);
    digitalWrite(7,LOW);
  }
  else
  {
    digitalWrite(2, LOW);
    digitalWrite(7, LOW);
  }
}
```