

Name – Parag Gattani

Program No. – 04

Program Title – LED fading with potentiometer

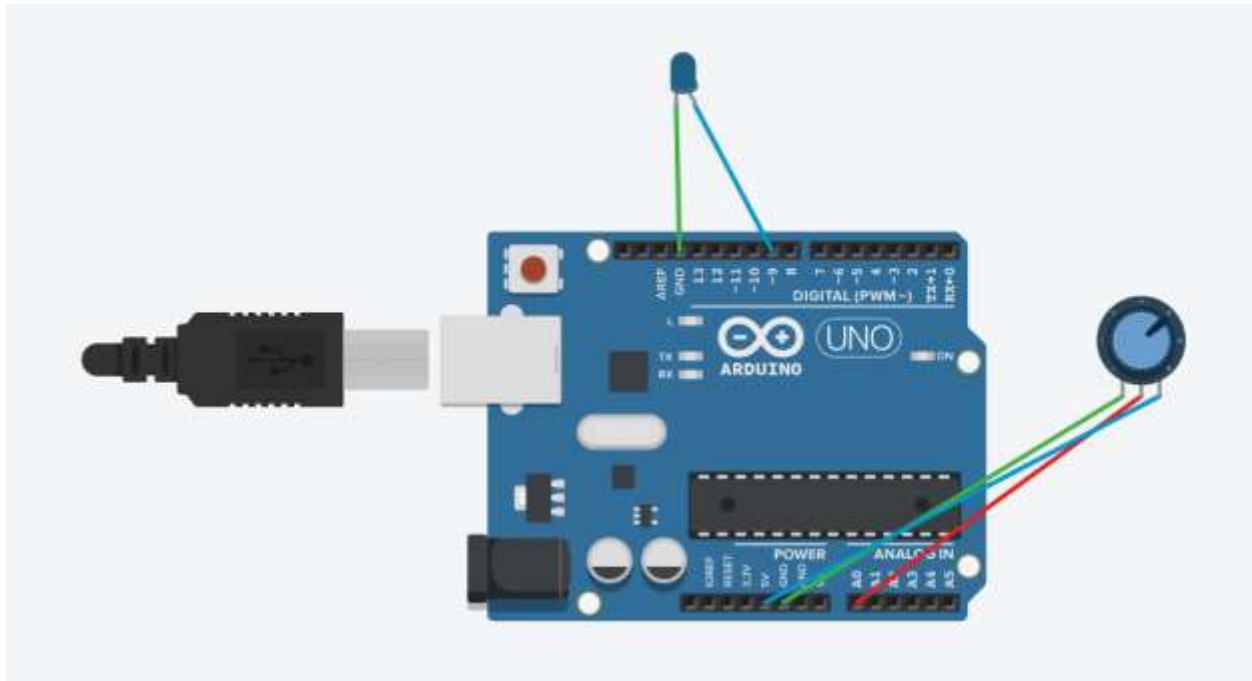
AIM

Demonstrate to show LED fading(analog output).

HARDWARES REQUIRED

- Arduino Board
- LED bulb
- Potentiometer

CIRCUIT DIAGRAM



WRITE-UP

Name - Pooja Gattani
USN - IBM18C5067

23/09/2020

Exp-3

LED FADING WITH POTENTIOMETER

Aim :-

To ~~Demonstrate ON/OFF of a LED using Pushbutton~~

Demonstrate to show LED fading (Analog Output)

Hardware Required :-

Arduino Board

Potentiometer

LED Bulb

CODE :-

```
int LED_PIN = 9;
void setup()
{
  Serial.begin(9600);
  pinMode(LED_PIN, OUTPUT);
}
void loop()
{
  int analogValue = analogRead(A0);
  int brightness = map(analogValue, 0, 1023, 0, 255);
  analogWrite(LED_PIN, brightness);
  Serial.print("Analog: ");
  Serial.print(analogValue);
  Serial.print(" , Brightness: ");
  Serial.println(brightness);
  delay(100);
}
```

CODE

```
int LED_PIN = 9;

void setup()
{
  Serial.begin(9600);
  pinMode(LED_PIN, OUTPUT);
}

void loop()
{

  int analogValue = analogRead(A0);
  int brightness = map(analogValue, 0, 1023, 0, 255);
  analogWrite(LED_PIN, brightness);
  Serial.print("Analog: ");
  Serial.print(analogValue);
  Serial.print(", Brightness : ");
  Serial.println(brightness);
  delay(100);
}
```

}

OUTPUT

Fading of LED with potentiometer.