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Program No. – 04

Program Title – LED fading with potentiometer
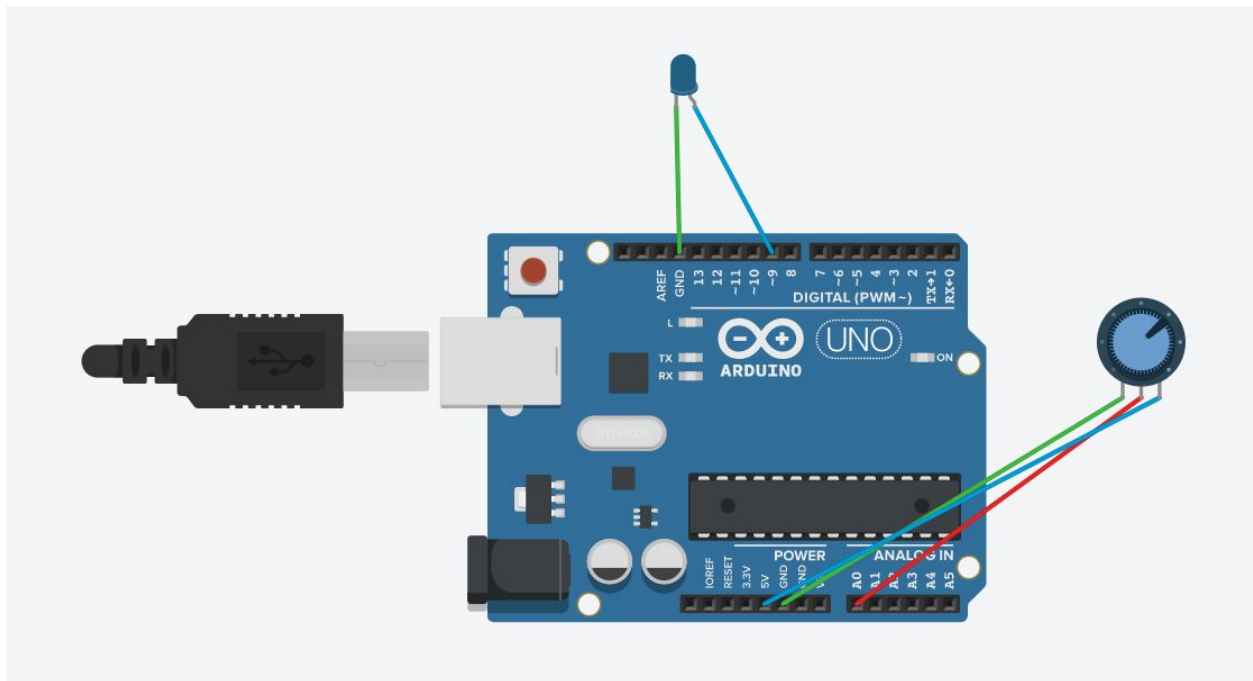

AIM

Demonstrate to show LED fading(analog output).

HARDWARES REQUIRED

- Arduino Board
- LED bulb
- Potentiometer

CIRCUIT DIAGRAM

WRITE-UP

PFA

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.