Lab 2 : Program 3

Date : 23/09/20
Experiment : LED fade potentiometer
Aim:To fade LED digitally.

Hardware :
- Arduino Uno Board
- 220 Ohm resistor
- Potentiometer
- LED bulb
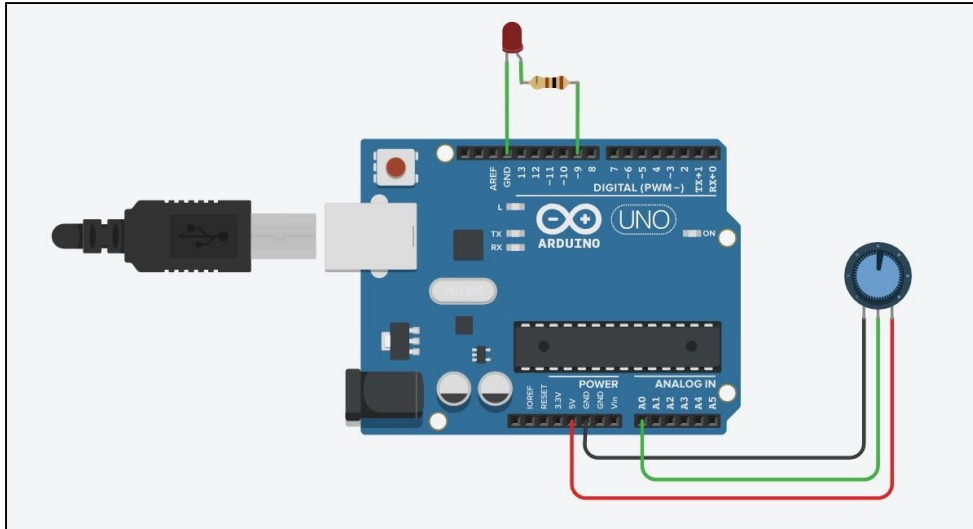
Source :

```
int potentiometer = A0 ;
int led = 9 ;

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

void loop()
{
  int analog = analogRead(potentiometer);
  int br = map(analog,0,1023,0,255);
  analogWrite(9,br);
  Serial.println((String)"Analog: "+analog+ "Brightness : "
+br);
  delay(500);
}
```

Observation : LED glows and fades with potentiometer.

Circuit :

Write Up :

IOT LAB 2   LED Potentiometer Fade   Mohammed Tanvir

Source Code   23/09/20

```
void setup() {
    Serial.begin(9600);
    pinMode(9, OUTPUT);
}

void loop() {
    int analog = analogRead(A0);
    int br = map(0, 1023, 0, 255);
    analogWrite(9, br);
    Serial.println((String)"Analog:" + analog +
                    " Brightness:" + br);
    delay(500);
}
```

Circuit Diagram

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Observation.

    The LED glows and fade as the dial is rotated.