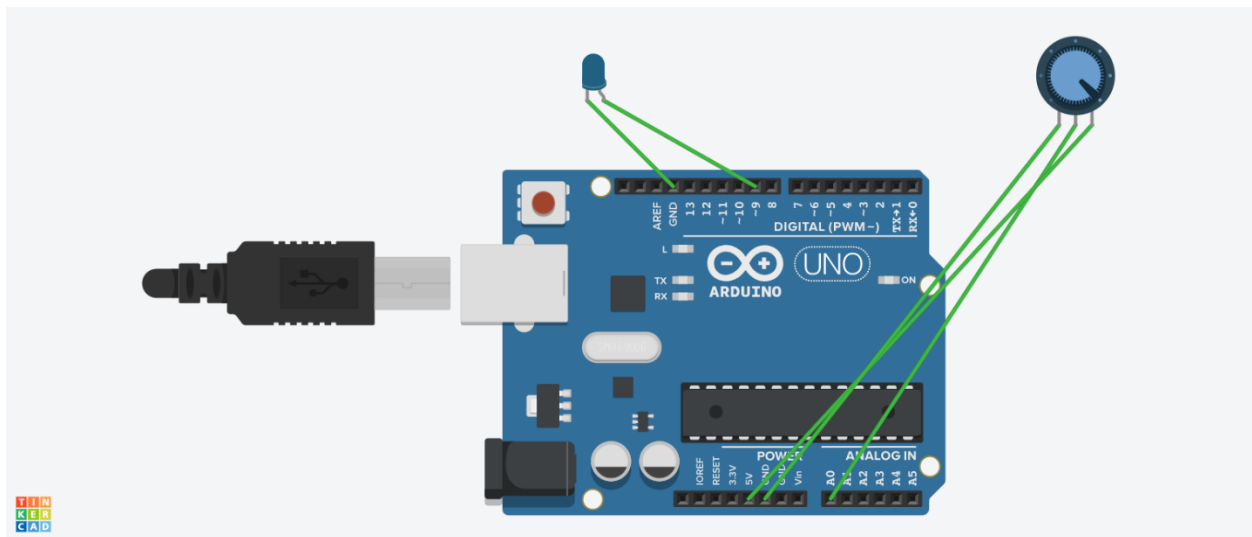# Sakshi Srivastava
1BM18CS090

PROGRAM TITLE: LED FADING (USING POTENTIOMETER)

Aim: DEMONSTRATE LED FADING USING POTENTIOMETER

Hardware Required:

- Arduino Board
- LED
- Potentiometer

Circuit Diagram:

Write-Up:

NAME: Sakshi Srivastava   USN: 1BM18CS090   Date. 23/9/2020

Expt. No.....5....   Page No......7......

PROGRAM TITLE :   LED FADING (USING Potentiometer)

Aim : To demonstrate LED fading using potentiometer.

Hardware Required:-
- Arduino Board.
- LED.
- Potentiometer.

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/OBSERVATION:

LED is fading.