

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);
}
```

