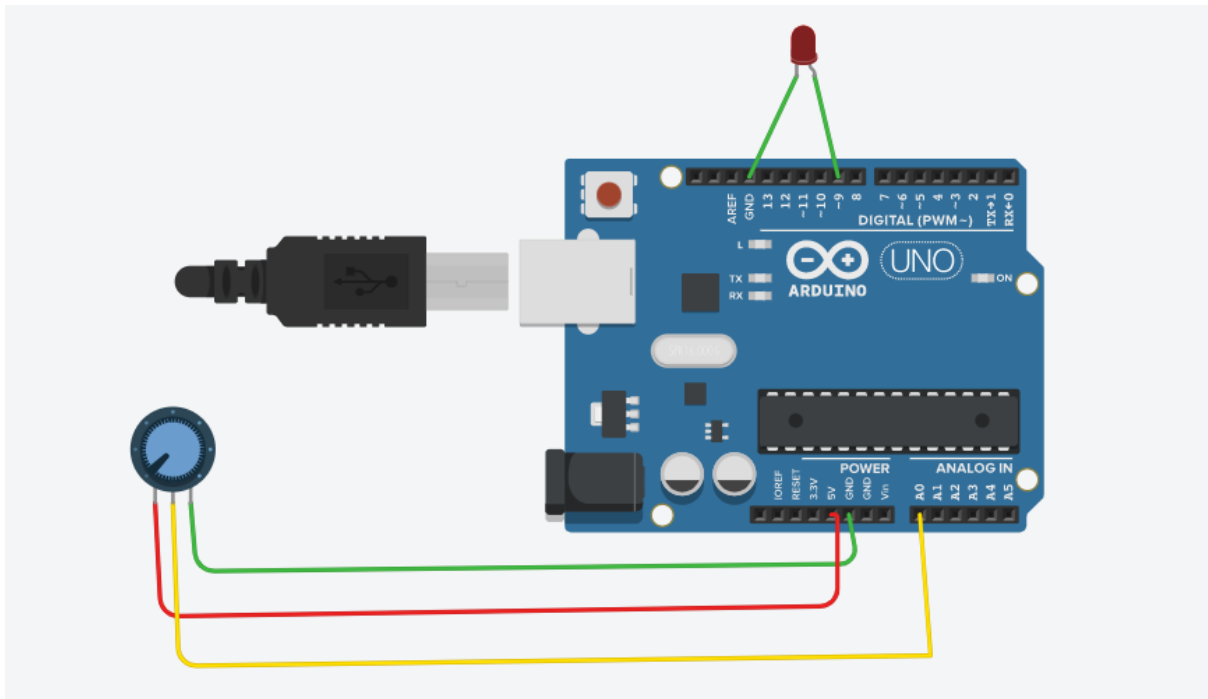


Potentiometer

1BM18CS034

Aim : To control brightness of L.E.D by using potentiometer

Circuit Diagram



Handwritten Code

Photometer

Harsh K.
18/10/2024
Day 3

```
int led_pin = 9;

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

void loop() {
  int analog_val = analogRead(A0);
  int brightness = map(analog_val, 0, 1023, 0, 255);
  analogWrite(led_pin, brightness);
  Serial.println(analog_val);
  Serial.println(brightness);
}
```

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Code

```
int led_pin = 9;
```

```
void setup()
```

```
{
```

```
  Serial.begin(9600);
```

```
  pinMode(led_pin, OUTPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
  int analog_val = analogRead(A0);
```

```
  int brightness = map(analog_val,0,1023,0,255);
```

```
  analogWrite(led_pin,brightness);
```

```
  Serial.print("Analog:");
```

```
  Serial.println(analog_val);
```

```
  Serial.print("Brightness:");
```

```
  Serial.println(brightness);
```

```
}
```

Observation/Output:

The brightness of L.E.D changes according to respective changes in potentiometer.