

Name – Parag Gattani

Program No. – 08

Program Title – LDR

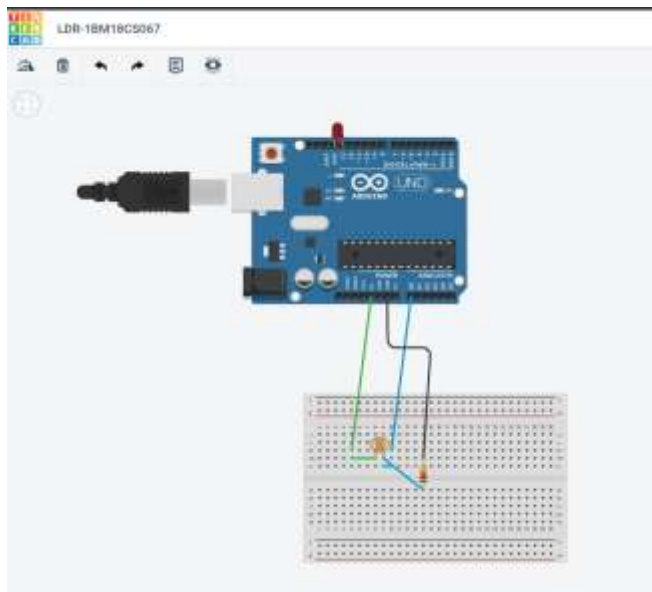
AIM

Demonstrate to show on/off of a LED using LDR night light simulation.

HARDWARES REQUIRED

- Arduino Board
- PhotoResistor
- Resistor
- LED
- Breadboard Small

CIRCUIT DIAGRAM



WRITE-UP

Exp. 6	<p>Name: Parag Gattani USN: 1BM28CS067</p> <p>30/09/2020</p>
	<p>Aim:- Demonstrate to show ON/OFF of a LED using LDR using LDR-Night Light Simulation.</p>
	<p>Hardware Required, Arduino Board Photoresistor Resistor LED Breadboard small</p>
	<p>Code:-</p> <pre>const int ledPin = 13; const int ldrPin = A0; void setup() { Serial.begin(9600); pinMode(ledPin, OUTPUT); pinMode(ldrPin, INPUT); } void loop() { int ldrStatus = analogRead(ldrPin); Serial.println(ldrStatus); if (ldrStatus <= 10) { digitalWrite(ledPin, HIGH); Serial.println("LDR is Dark, LED is ON"); } else { digitalWrite(ledPin, LOW); Serial.println(" ---- "); } }</pre>

CODE

```
const int ledPin = 13;

const int ldrPin = A0;

void setup()
{
    Serial.begin(9600);
    pinMode(ledPin, OUTPUT);
    pinMode(ldrPin, INPUT);
}

void loop()
{
    int ldrStatus = analogRead(ldrPin);
    Serial.println(ldrStatus);
    if(ldrStatus <=10)
    {
        digitalWrite(ledPin, HIGH);
        Serial.println("LDR is DARK, LED is ON");
    }
}
```

```
    }  
    else  
    {  
        digitalWrite(ledPin, LOW);  
        Serial.println("-----");  
    }  
}
```

OUTPUT

Design a system to show on/off of a LED using LDR night light simulation.