**Practical 4**

**AIM:** Detection of the light using photo resistor.

const int sensorPin = A0; // choose the pin for the Photo resistor

const int ledPin = 9; // choose the pin for a LED

int lightCal; // variable for reading the initial state of photo sensor

int lightVal; // variable for reading the current state photo sensor

void setup()

{

pinMode(ledPin, OUTPUT); // declare LED as output

lightCal = analogRead(sensorPin);

}

void loop() {

lightVal =analogRead(sensorPin); // read input value

if(lightVal < lightCal-50) { // check if the input is less than threshold

digitalWrite(9,HIGH); // turn LED ON}

else { digitalWrite(9, LOW); // turn LED OFF

}

}

**OUTPUT:**

