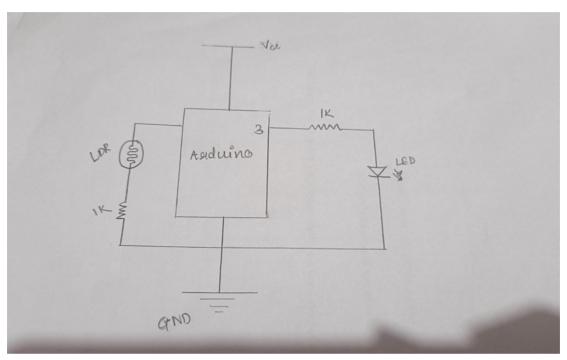
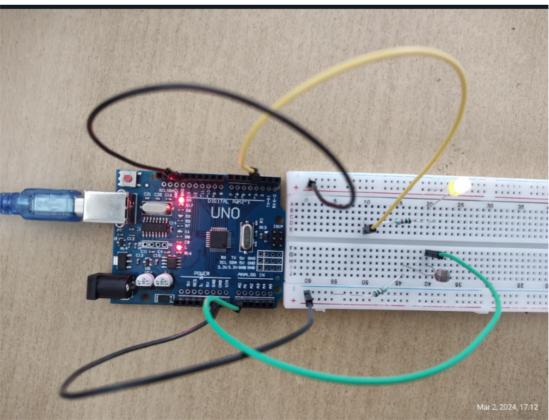
```
Experiment No : 10
Statement: Blink an LED in accordance with the brightness.
Blinking frequency increases with
increase in brightness.
Date of Exp. : xx/xx/xxxx
Author: Vedanti Pote (A-11)
Code:
const int ledPin = 3;  // Pin number for the LED
const int ldrPin = A0; // Pin number for the ldr
void setup() {
  pinMode(ledPin, OUTPUT);
  Serial.begin(9600);
}
void loop() {
  int lightLevel = analogRead(ldrPin);
  // Map the light level to a blinking frequency
  int blinkInterval = map(lightLevel, 0, 1023, 100, 1000);
  digitalWrite(ledPin, HIGH); // Turn on the LED
  delay(blinkInterval);
  digitalWrite(ledPin, LOW); // Turn off the LED
  delay(blinkInterval);
  // Print the light level and blinking frequency to the
serial monitor
  Serial.print("Light Level: ");
  Serial.print(lightLevel);
  Serial.print("\tBlinking Frequency: ");
```

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```
Serial.print(1000 / blinkInterval); // Frequency in Hz
Serial.println(" Hz");
```

}





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