```
/*
Experiment No.: 10
Statement
             :
                   Blink an LED in accordance with the
brightness. Blinking frequency increases
                                             with increase
                                                             in
brightness.
Date of Exp. : xx/xx/xxx
Author
         :
                   Aabha Nimje (A-33)
*/
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: ");
    Serial.print(1000 / blinkInterval); // Frequency in Hz
    Serial.println(" Hz");
}
```

```
Output Serial Monitor X
                   Message (Enter to send message to 'Arduino Uno' on 'COM3')
               Light Level: 288
                                                                                                                                             ntruvina treducinch. v uv
                                                                                                                   Blinking Frequency: 2 Hz
Blinking Frequency: 3 Hz
Blinking Frequency: 4 Hz
                Light Level: 298
               Light Level: 281
            Light Level: 303
Light Level: 281
            Light Level: 178
Light Level: 140
                                                                                                                                        Blinking Frequency: 4 Hz
           Light Level: 98 Blinking Frequency: 5 Hz
          Light Level: 0 Blinking Frequency: 10 Hz
Light Level: 74 Blinking Frequency: 6 Hz
Light Level: 894
Light Level: 601
Light Level: 656
Light Level: 556
Light Level: 490
Light Level: 490
Light Level: 411
Light Level: 415
Light Level: 416
Light Level: 416
Light Level: 417
Light Level: 418
Light Level: 418
Light Level: 418
Light Level: 419
Light Level: 419
Light Level: 410
         Light Level: 74 Blinking Frequency: 6 Hz
   Light Level: 531
Light Level: 515
                                                                                                                          Blinking Frequency: 1 Hz
                                                                                                                                Blinking Frequency: 1 Hz
                                                                                                                         Blinking Frequency: 1 Hz
```



