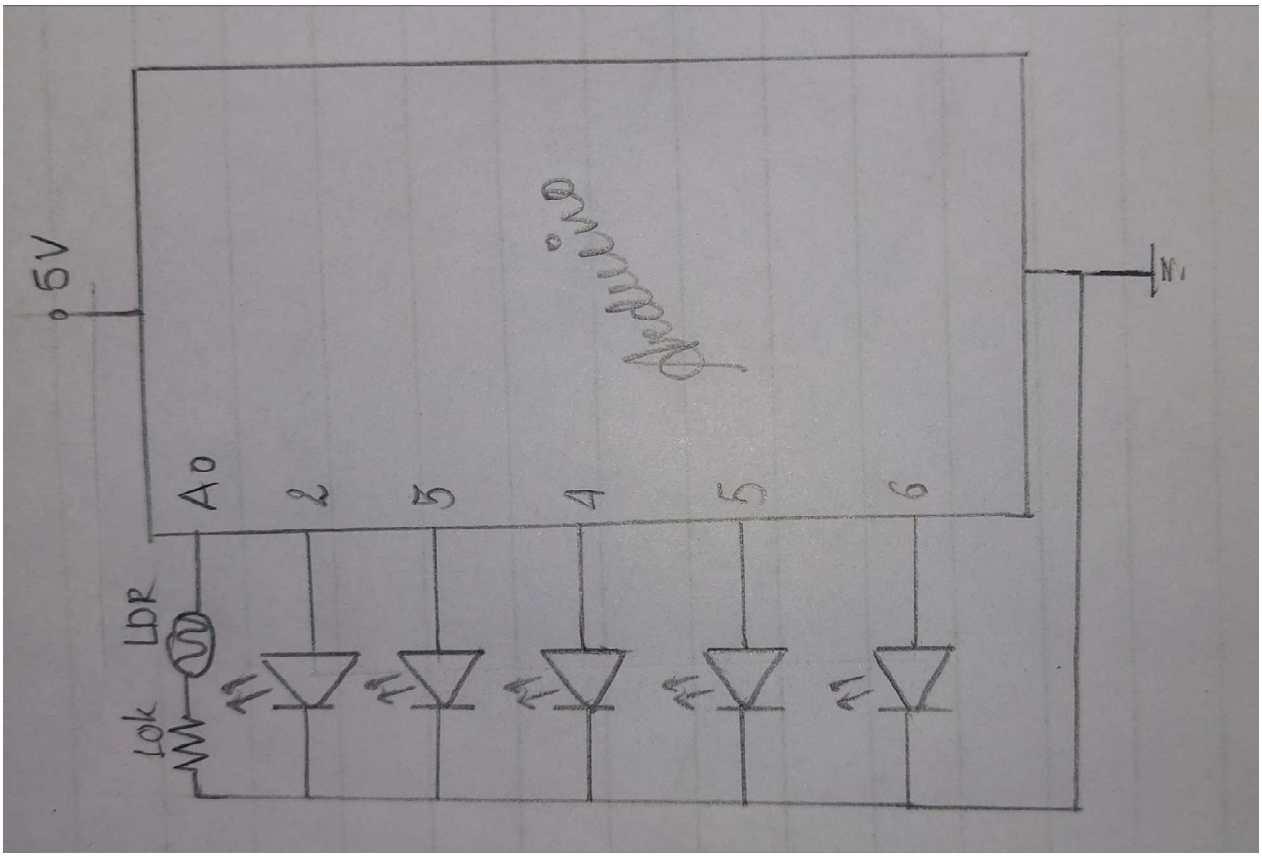
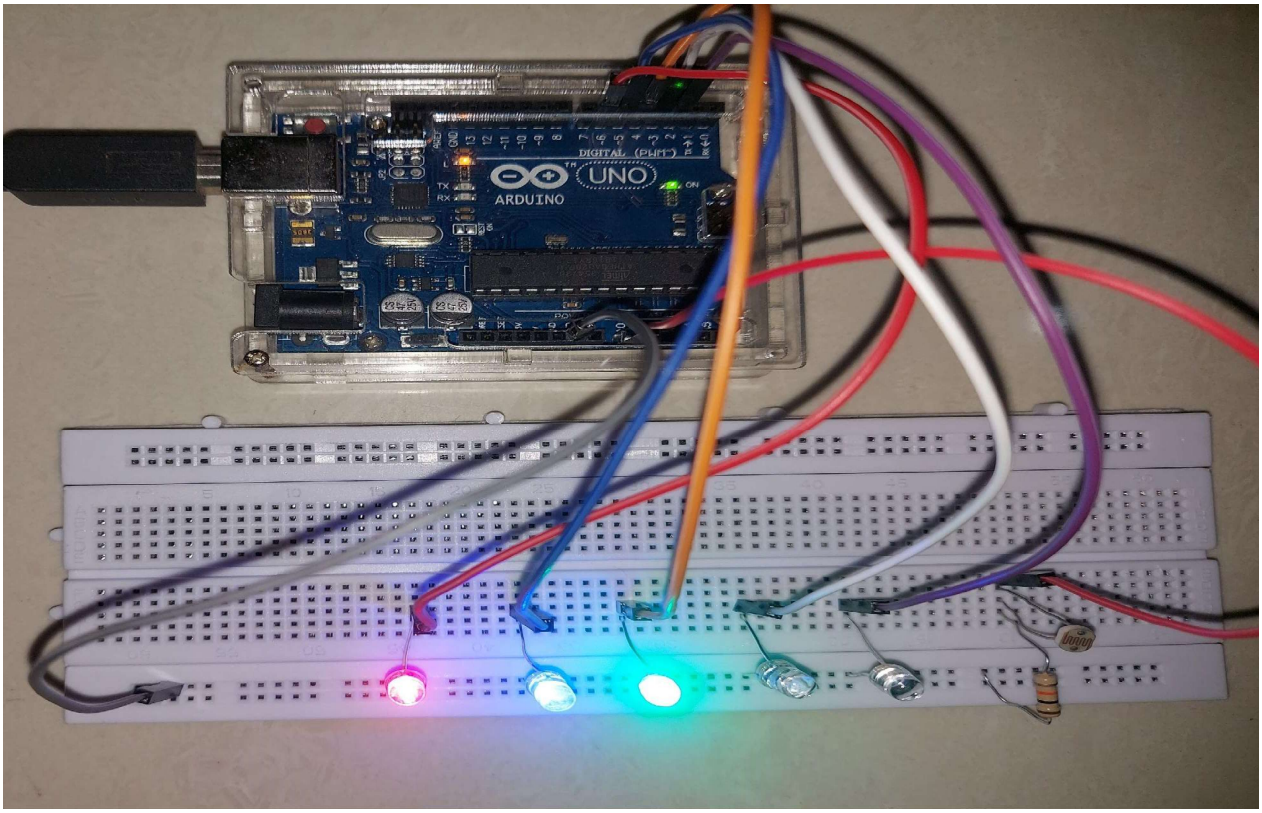
```
/*

Experiment No. :    03

Statement      :    Make a light intensity meter that represent
light intensity on 5 LEDs, such that all LEDs would glow for
maximum light, no LED would glow for dark condition, and likewise
for in between light intensities.

Date of Exp.   :    xx/xx/xxxx

Author         :    Aabha Nimje (A-33)

*/


const int ldrPin = A0;       // LDR connected to analog pin A0

const int numLeds = 5;       // Number of LEDs

const int ledPins[] = {2, 3, 4, 5, 6};  // Pins for the LEDs

void setup()

{

  pinMode(ldrPin, INPUT);

  for (int i = 0; i < numLeds; i++)

  {

    pinMode(ledPins[i], OUTPUT);

  }

  Serial.begin(9600);

}

void loop()

 {
```

```
  int lightIntensity = analogRead(ldrPin);
  // Map the light intensity to the number of LEDs
 int numLedsToTurnOn = map(lightIntensity, 0, 1023, 0, numLeds);
 // Turn on the corresponding number of LEDs
  for (int i = 0; i < numLeds; i++)
  {
    digitalWrite(ledPins[i], i < numLedsToTurnOn);
  }
  // Print the light intensity value to the Serial Monitor
  Serial.println(lightIntensity);
  delay(500);  // Adjust the delay as needed
}
```


5V
A0
2
3
4
5
6
LDR
10k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