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 forin between light intensities.

Date of Exp. : xx/xx/xxxx

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const int LDR\_PIN = A0; // Pin connected to the LDR

const int LED\_PINS[] = {2, 3, 4, 5, 6}; // Pins connected to the LEDs

const int NUM\_LEDS = sizeof(LED\_PINS) / sizeof(LED\_PINS[0]);

void setup() {

// Set the LED pins as outputs

for (int i = 0; i < NUM\_LEDS; i++) {

pinMode(LED\_PINS[i], OUTPUT);

}

}

void loop() {

int lightIntensity = analogRead(LDR\_PIN);

int mappedIntensity = map(lightIntensity, 0, 1023, 0, NUM\_LEDS);

// Turn off all LEDs

for (int i = 0; i < NUM\_LEDS; i++) {

digitalWrite(LED\_PINS[i], LOW);

}

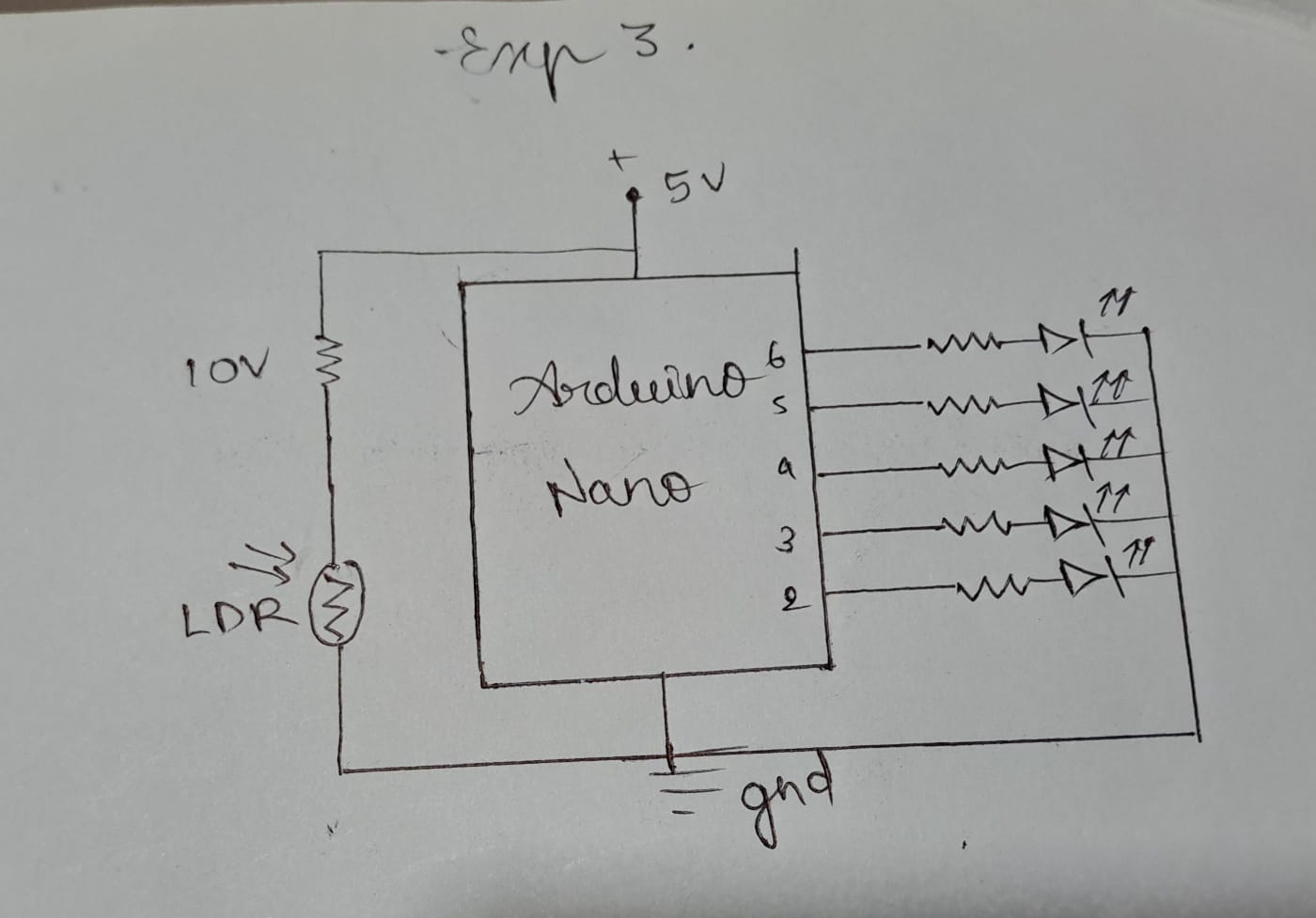
// Turn on LEDs according to light intensity

for (int i = 0; i < mappedIntensity; i++) {

digitalWrite(LED\_PINS[i], HIGH);

}

delay(100); // Adjust the delay as needed

}

