**IOT CODES:**

**1.BLINK LED:**

void setup() {

pinMode(13, OUTPUT);

}

void loop() {

digitalWrite(13,HIGH);

delay (5000);

digitalWrite(13,LOW);

delay(5000);

}

**2.intensity:**

void setup() { pinMode(5, OUTPUT); }

void loop() {

fadeLED(0, 255, 5);

fadeLED(255, 0, -5);

}

void fadeLED(int start, int end, int step) {

for (int i = start; i <= end && i >= 0; i += step) {

analogWrite(5, i);

delay(50);

}

}

**3.lcd\_disp:**

#include <LiquidCrystal.h>

LiquidCrystal lcd(A0, A1, A2, A3, A4, A5);

void setup() {

lcd.begin(16, 2);

lcd.print("Hello World");

}

void loop() {

for (int i = 0; i < 10; ++i) {

lcd.clear();

lcd.setCursor(0, 1);

lcd.print(i);

delay(1000);

}

}

**4.buzzer:**

void setup() {

pinMode(12, OUTPUT);

}

void loop() {

digitalWrite(12, HIGH);

delay(5000);

digitalWrite(12, LOW);

delay(5000);

}

**5.LDR\_control:**

const int lightPin = A6;

void setup() {

Serial.begin(9600);

}

void loop() {

Serial.println("Light Intensity: " + String(analogRead(lightPin)));

delay(1000);

}

**6.temperature:**

const int tempPin = 6;

void setup() {

Serial.begin(9600);

}

void loop() {

float cel = analogRead(tempPin) \* 0.48828125;

Serial.println("TEMPERATURE = " + String(cel) + "\*C");

delay(1000);

}

**7.key\_input:**

void setup() {

for (int i = 2; i <= 7; i++) {

pinMode(i, OUTPUT);

digitalWrite(i, HIGH);

}

pinMode(9, INPUT\_PULLUP);

}

void loop() {

if (!digitalRead(9)) {

for (int i = 2; i <= 7; i++) {

digitalWrite(i, LOW);

delay(2000);

digitalWrite(i, HIGH);

}

}

}

**8.servo:**

#include <Servo.h>

Servo myservo;

void setup() {

myservo.attach(10);

}

void loop() {

for (int pos = 0; pos <= 180; pos += 10) {

myservo.write(pos);

delay(500); // Reduced delay

}

for (int pos = 180; pos >= 0; pos -= 10) {

myservo.write(pos);

delay(500); // Reduced delay

}

}

**11.wakeup\_timer:**

void setup() {

Serial.begin(115200);

Serial.setTimeout(2000);

while (!Serial) { }

Serial.println("I'm awake, going to sleep for 30 seconds");

delay(30000); // 30 seconds delay

Serial.println("Waking up now");

}

void loop() {

// Empty loop

}