

LINK:-

<https://wokwi.com/projects/364529075100480513>

CODE:

```
#include <LiquidCrystal_I2C.h>
#define LIGHT_SENSOR_PIN 33
#define LED_PIN 13
#define buzzer 27
#define echoPin 4
#define trigPin 19
long duration;
int distance;
LiquidCrystal_I2C LCD = LiquidCrystal_I2C(0x27, 16, 2);
void setup() {
    Serial.begin(115200);
    pinMode(LED_PIN, OUTPUT);
    pinMode(trigPin, OUTPUT);
    pinMode(echoPin, INPUT);
    pinMode(buzzer, OUTPUT);

    LCD.init();
    LCD.backlight();
    LCD.setCursor(1, 0);
    LCD.print("IOT SMART HOME");
    LCD.setCursor(3, 1);
    LCD.print("...");
    delay(5000);
    LCD.clear();
}
void loop() {
    digitalWrite(trigPin, LOW);
    delayMicroseconds(2);
    digitalWrite(trigPin, HIGH);
    delayMicroseconds(10);
    digitalWrite(trigPin, LOW);
    duration = pulseIn(echoPin, HIGH);
    distance = duration * 0.034 / 2;
    int LDRValue = analogRead(LIGHT_SENSOR_PIN);
    if (LDRValue < 600)
        digitalWrite(LED_PIN, HIGH);
    else
        digitalWrite(LED_PIN, LOW);

    if (distance < 200)
```

```

        digitalWrite(buzzer, HIGH);
    else
        digitalWrite(buzzer, LOW);
    LCD.setCursor(0,0);
    LCD.print("Distance: ");
    LCD.print(distance);
    LCD.println(" cm");
    LCD.setCursor(0,1);
    LCD.print("LDRValue: ");
    LCD.println(LDRValue);
    Serial.print("Distance: ");
    Serial.print(distance);
    Serial.println(" cm");

    Serial.print("LDRValue: ");
    Serial.println(LDRValue);
}

```

CIRCUIT DIAGRAM:

