

### Experiment NO 3

CODE :-

```
#include "DHT.h"

// DHT11 setup
#define DHTPIN 2      // DHT11 data pin connected to digital pin 2
#define DHTTYPE DHT11
DHT dht(DHTPIN, DHTTYPE);

// Buzzer setup
#define BUZZER 8      // Buzzer connected to digital pin 8

void setup() {
    Serial.begin(9600);
    Serial.println("DHT11 Temperature with Buzzer Example");
    dht.begin();
    pinMode(BUZZER, OUTPUT); // Set buzzer as output
}

void loop() {
    float temperature = dht.readTemperature(); // Celsius

    if (isnan(temperature)) {
        Serial.println("Failed to read from DHT11 sensor!");
        return;
    }

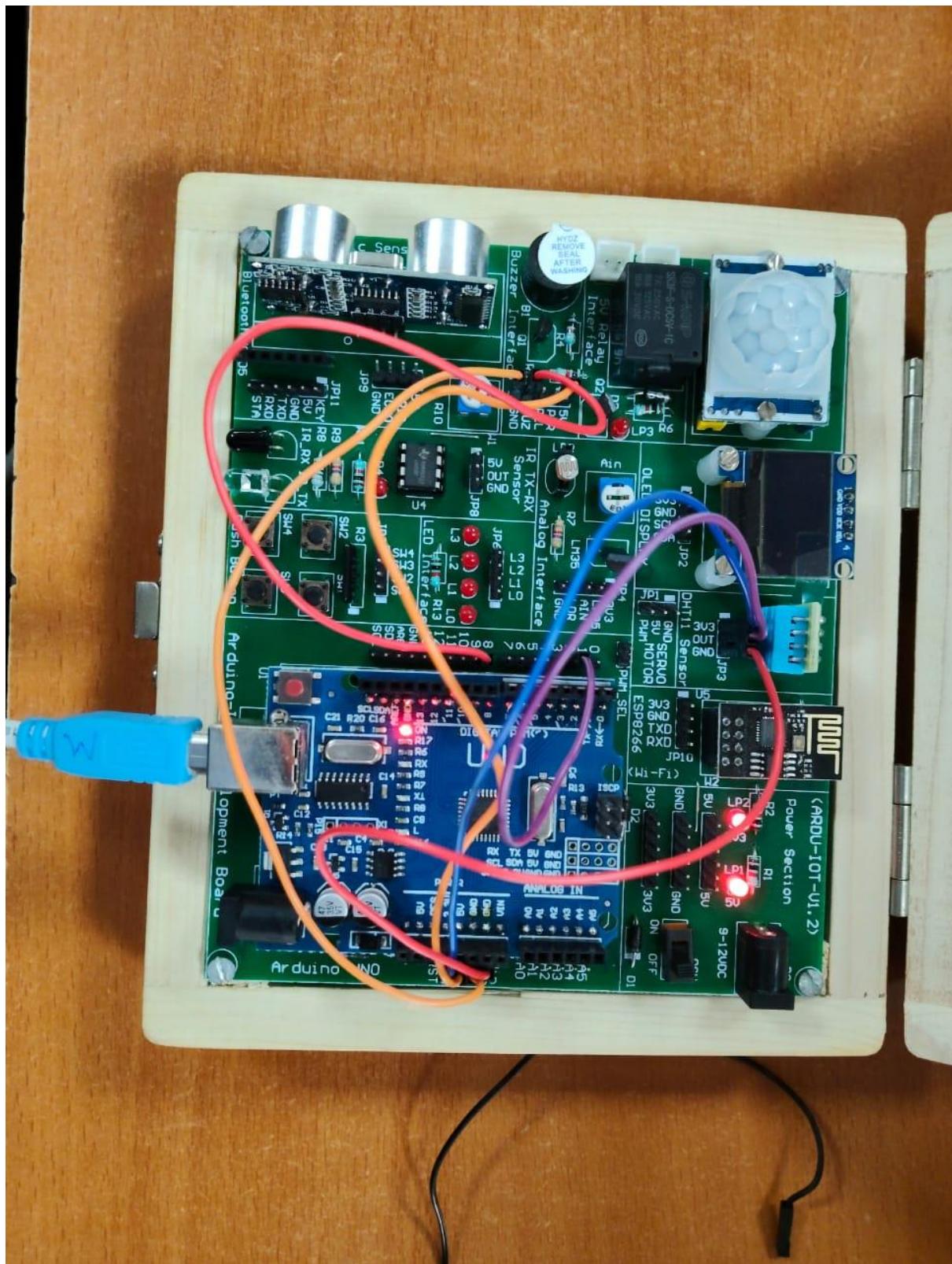
    Serial.print("Temperature: ");
```

```
Serial.print(temperature);
Serial.println(" °C");

// Condition for buzzer alert (temperature only)
if (temperature > 30) {
    digitalWrite(BUZZER, HIGH); // Turn buzzer ON
    delay(500);
    digitalWrite(BUZZER, LOW); // Turn buzzer OFF
    delay(500);
} else {
    digitalWrite(BUZZER, LOW); // Keep buzzer OFF
}

delay(2000); // Wait 2 seconds before next reading
}
```

## OUTPUT :-



sketch\_sep4a | Arduino IDE 2.3.6

File Edit Sketch Tools Help

Arduino Uno

LIBRARY MANAGER

DHT11

Type: All Topic: All

DFRobot\_DHT11 by DFRobot

DFRobot Standard library(SKU:DFR0067), Digital DHT11 Temperature and... More info

1.0.0 **INSTALL**

DHT Sensors Non-Blocking by Toan Nguyen

1.0.4 installed

An Arduino library for the DHT sensor family (DHT11, DHT22,...). With Non-Blocking... More info

1.0.4 **REMOVE**

DHT kxn by Adafruit

3.4.4 installed

BACKUP Arduino library for DHT11, DHT22, etc Temp & ...

sketch\_sep4a.ino

```
1 #include "DHT.h"
2
3 // DHT11 setup
4 #define DHTPIN 2          // DHT11 data pin connected to digital pin 2
5 #define DHTTYPE DHT11
6 DHT dht(DHTPIN, DHTTYPE);
7
8 // Buzzer setup
9 #define BUZZER 8          // Buzzer connected to digital pin 8
10
11 void setup() {
12     Serial.begin(9600);
13     Serial.println("DHT11 Temperature with Buzzer Example");
14     dht.begin();
15     pinMode(BUZZER, OUTPUT); // Set buzzer as output
16 }
17
18 void loop() {
```

Output Serial Monitor X

Message (Enter to send message to 'Arduino Uno' on 'COM6')

10:41:31.619 -> Humidity: 68.00 % | Temperature: 26.20 °C  
10:41:34.612 -> Humidity: 68.00 % | Temperature: 26.20 °C  
10:41:37.645 -> Humidity: 68.00 % | Temperature: 26.20 °C  
10:41:45.460 -> DHT11 Temperature with Buzzer Example  
10:41:45.492 -> Temperature: 26.20 °C  
10:41:47.517 -> Temperature: 26.20 °C  
10:41:49.571 -> Temperature: 26.10 °C  
10:41:51.582 -> Temperature: 26.10 °C

New Line 9600 baud

Ln 17, Col 1 Arduino Uno on COM6 0 2