# Assignment No.2(Temperature Sensor)

**USING  ARDIUNO**

**INPUT:-**

```
#include <dht.h>

dht DHT;

#define DHT11_PIN 4

void setup() {

Serial.begin(9600);

}

void loop() {

int chk=DHT.read11(DHT11_PIN);

Serial.print("Temperature: ");

Serial.println(DHT.temperature);

Serial.print("Humidity: ");

Serial.println(DHT.humidity);

delay(1000);

}
```

## OUTPUT:-

## (SERIAL MONITOR OUTPUT)

Output:

Temperature: 26.00

Humidity: 72.00

Temperature: 26.00

Humidity: 72.00

Temperature: 26.00

Humidity: 72.00

Temperature: 26.00

Humidity: 72.00

Temperature: 26.00

Humidity: 72.00

Temperature: 26.00

Humidity: 73.00

Temperature: 26.00

Humidity: 73.00

Temperature: 26.00

Humidity: 73.00

Temperature: 26.00
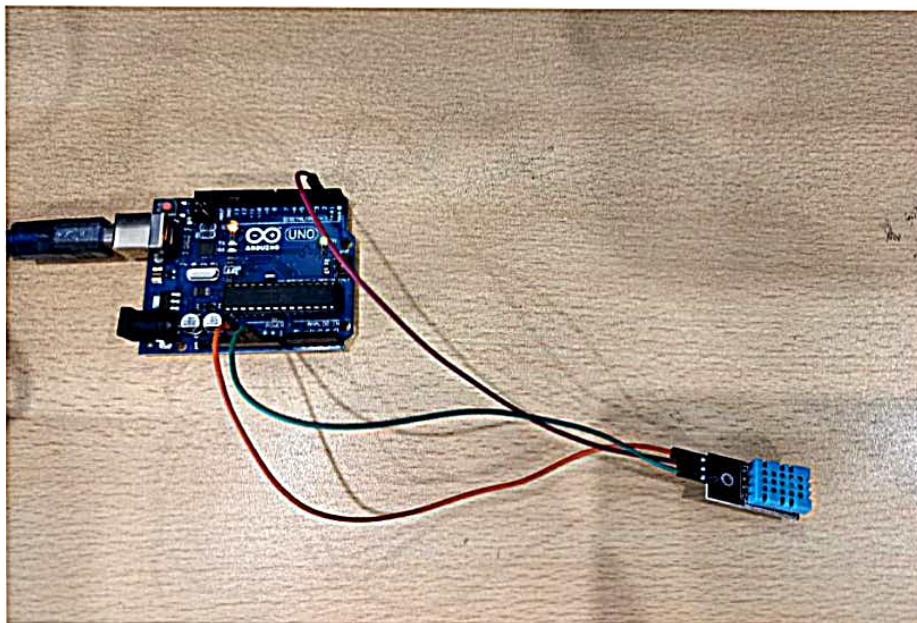
Humidity: 73.00

Temperature: 26.00

Humidity: 73.00

Temperature: 26.00

Humidity: 73.00

Temperature: 26.00

Humidity: 73.00

Temperature: 26.00

Humidity: 73.00

Temperature: 26.00

Humidity: 72.00

## USING RASPBERRY PI

**INPUT:-**

DHT11

```python
import Adafruit_DHT

import time

import RPi.GPIO as GPIO

from time import sleep


GPIO.setwarnings(False)

GPIO.setmode(GPIO.BCM)

GPIO.setup(17, GPIO.OUT, initial=GPIO.LOW )


DHT_SENSOR= Adafruit_DHT.DHT11

DHT_PIN=4


while True:

   hum,temp=Adafruit_DHT.read(DHT_SENSOR,DHT_PIN)

if hum is not None and temp is not None:

print("Humidity: ",hum)

print("Temperature: ",temp)

GPIO.output(17,GPIO.HIGH)

else:

print("ERROR")

GPIO.output(17,GPIO.LOW)
```

**OUTPUT:-**

**(SERIAL MONITOR OUTPUT)**

Humidity: 70.00

Temperature: 23.00

Humidity: 70.00

Temperature: 24.00

Humidity: 70.00

Temperature: 24.00

Humidity: 70.00

Temperature: 24.00

Humidity: 72.00

Temperature: 26.00

Humidity: 72.00

Temperature: 26.00

Humidity: 73.00

Temperature: 26.00

Humidity: 73.00

Temperature: 26.00

Humidity: 73.00

Temperature: 26.00

Humidity: 73.00