

ASSIGNMENT 2

AIM:

Build a **Python code** , Generate Temperature and Humidity values(Use random function to generate values) and write a condition to detect an Alarm in case of high Temperature and Humidity.

Example:

Temp is greater than 30C , play alarm sound. Same for Humidity.

Python Code:

```
import random
from machine import Pin
import dht
import time

dht_sensor = dht.DHT11(Pin(4))

alarm= Pin(5, Pin.OUT)

while True:

    dht_sensor.measure()
    temperature = dht_sensor.temperature()
    humidity = dht_sensor.humidity()

    print("Temperature: ", temperature, "°C")
    print("Humidity: ", humidity, "%")

    if temperature > 30 or humidity > 30:

        alarm.on()
    else:

        alarm.off()

    time.sleep(5)
```