

# IBM ASSIGNMENT - 2

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1)Build a python code, Assume u get temperature and humidity values (generated with random function to variable ) and write a condition to continuously detect alarm in case of high temperature.

CODE:

```
import time

import adafruit_dht

import board

dht = adafruit_dht.DHT22(board.D2)

while True:

    try:

        temperature = dht.temperature

        humidity = dht.humidity

        # Print what we got to the REPL
```

```
print("Temp: {:.1f} *C \t Humidity: {}%".format(temperature, humidity))
```

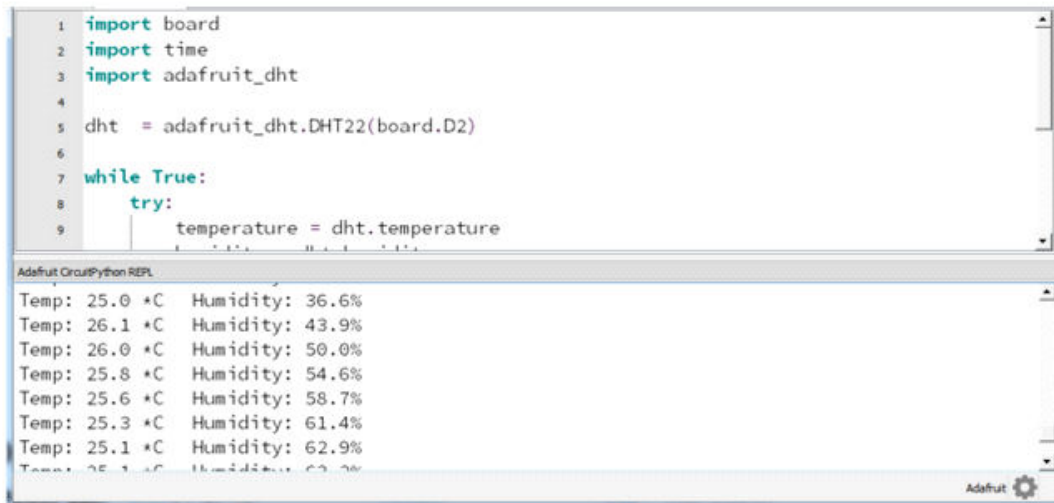
```
except RuntimeError as e:
```

```
# Reading doesn't always work! Just print error and we'll try again
```

```
print("Reading from DHT failure: ", e.args)
```

```
time.sleep(1)
```

output:



The screenshot shows the Adafruit CircuitPython REPL interface. The top pane contains the Python code for reading temperature and humidity from a DHT22 sensor. The bottom pane shows the output of the code, which is a series of lines displaying temperature and humidity values. The output shows a range of values, indicating that the sensor is working and providing data.

```
1 import board
2 import time
3 import adafruit_dht
4
5 dht = adafruit_dht.DHT22(board.D2)
6
7 while True:
8     try:
9         temperature = dht.temperature
10        humidity = dht.humidity
11        print("Temp: {:.1f} *C \t Humidity: {}%".format(temperature, humidity))
12    except RuntimeError as e:
13        print("Reading from DHT failure: ", e.args)
14        time.sleep(1)
```

Temp: 25.0 \*C Humidity: 36.6%  
Temp: 26.1 \*C Humidity: 43.9%  
Temp: 26.0 \*C Humidity: 50.0%  
Temp: 25.8 \*C Humidity: 54.6%  
Temp: 25.6 \*C Humidity: 58.7%  
Temp: 25.3 \*C Humidity: 61.4%  
Temp: 25.1 \*C Humidity: 62.9%  
Temp: 25.1 \*C Humidity: 62.9%