IOT ASSIGNMENT 2

```
#define DHTPIN 2

#define DHTTYPE DHT11


float tempF;

float tempC;

float humidity;


int setTime=500;

int dt=1000;


DHT TH(DHTPIN,DHTTYPE);


void setup() {

  // put your setup code here, to run once:

Serial.begin(115200);

TH.begin();

delay(setTime);

}

void loop() {

  // put your main code here, to run repeatedly:

tempC=TH.readTemperature();

tempF=TH.readTemperature(true);
```

```
humidity=TH.readHumidity();



Serial.print(tempF);

Serial.print(" Degrees F, ");

Serial.print(tempC);

Serial.print(" Degrees C, ");

Serial.print(humidity);

Serial.println("% Humidity");

delay(dt);

}
```

```
import time
import board
import adafruit_dht
import psutil
# We first check if a libgpiod process is running. If yes, we kill it!
for proc in psutil.process_iter():
    if proc.name() == 'libgpiod_pulsein' or proc.name() == 'libgpiod_pulsei':
        proc.kill()
sensor = adafruit_dht.DHT11(board.D23)
while True:
    try:
        temp = sensor.temperature
        humidity = sensor.humidity
        print("Temperature: {}*C   Humidity: {}% ".format(temp, humidity))
    except RuntimeError as error:
        print(error.args[0])
        time.sleep(2.0)
        continue
    except Exception as error:
        sensor.exit()
        raise error
```

```
    time.sleep(2.0)



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)
```