ASSIGNMENT-2

Team ID :	NM2023TMID12217
Team Leader :	MYTHILI . R
NAME :	Swathi . R
TITLE :	Generate Temperature and Humidity Values n Python.

CODE:

```
"""

'temp_humidity.py'

==================================

Example of sending analog sensor values

to an Adafruit IO feed.

Author(s): Brent Rubell Dependencies:

- Adafruit IO Python Client

        (https://github.com/adafruit/io-client-python)

- Adafruit_Python_DHT
  (https://github.com/adafruit/Adafruit_Python_DHT)
```

```
"""
# import standard python modules.
import time
# import adafruit dht library.
import Adafruit_DHT
# import Adafruit IO REST client. from
Adafruit_IO import Client, Feed


# Delay in-between sensor readings, in seconds.
DHT_READ_TIMEOUT = 5


# Pin connected to DHT22 data pin
DHT_DATA_PIN = 26


# Set to your Adafruit IO key.
# Remember, your key is a secret,
# so make sure not to publish it when you publish this code!
ADAFRUIT_IO_KEY = 'YOUR_AIO_KEY'
```

```
# Set to your Adafruit IO username.

# (go to https://accounts.adafruit.com to find your username).

ADAFRUIT_IO_USERNAME = 'YOUR_AIO_USERNAME'



# Create an instance of the REST client.

aio = Client(ADAFRUIT_IO_USERNAME, ADAFRUIT_IO_KEY)



# Set up Adafruit IO Feeds. temperature_feed

= aio.feeds('temperature') humidity_feed =

aio.feeds('humidity')



# Set up DHT22 Sensor.

dht22_sensor = Adafruit_DHT.DHT22

 while

True:

    humidity, temperature = Adafruit_DHT.read_retry(dht22_sensor,

DHT_DATA_PIN)     if humidity is not None and temperature is not

None:          print('Temp={0:0.1f}*C

Humidity={1:0.1f}%'.format(temperature, humidity))
```

```
        # Send humidity and temperature feeds to Adafruit IO

temperature = '%.2f'%(temperature)         humidity =

'%.2f'%(humidity)         aio.send(temperature_feed.key,

str(temperature))         aio.send(humidity_feed.key,

str(humidity))     else:

        print('Failed to get DHT22 Reading, trying again in ',
DHT_READ_TIMEOUT, 'seconds')

    # Timeout to avoid flooding Adafruit IO

time.sleep(DHT_READ_TIMEOUT)
```