# ASSIGNMENT-2

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|---|---|
| TeamID: | NM2023TMID12350 |
| TeamLeader: | K. TAMILAZHAGAN |
| NAME: | K. TAMILAZHAGAN |
| TITLE: | GenerateTemperatureandHumidityValues usingPython. |

# CODE:

```
"""

'temp_humidity.py'

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

Exampleofsendinganalogsensorvaluestoan

AdafruitIOfeed.


Author(s):BrentRubellDependencies:


- AdafruitIOPythonClient
```

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

- Adafruit_Python_DHT(https://github.com/adafruit/A
  dafruit_Python_DHT)

"""

#importstandardpythonmodules.impo

rttime

#importadafruitdhtlibrary.impo

rtAdafruit_DHT

#importAdafruitIORESTclient.fromAdafru

it_IOimportClient,Feed




#Delayin-betweensensorreadings,inseconds.

DHT_READ_TIMEOUT=5



#PinconnectedtoDHT22datapinDHT_DA

TA_PIN=26



#SettoyourAdafruitIOkey.
```

```
#Remember,yourkeyisasecret,

#somakesurenottopublishitwhenyoupublishthiscode!ADAFRUIT_IO_KEY='YOU

R_AIO_KEY'


#SettoyourAdafruitIOusername.

#(gotohttps://accounts.adafruit.comtofindyourusername).ADAFRUIT_IO_U

SERNAME='YOUR_AIO_USERNAME'



#CreateaninstanceoftheRESTclient.

aio=Client(ADAFRUIT_IO_USERNAME,ADAFRUIT_IO_KEY)



#SetupAdafruitIOFeeds.temperature_feed

=aio.feeds('temperature')humidity_feed=ai

o.feeds('humidity')




# Set up DHT22

Sensor.dht22_sensor=Adafruit_DHT

.DHT22

 whileTrue:
```

```
    humidity,temperature=Adafruit_DHT.read_retry(dht22_sensor,DH
T_DATA_PIN)       if humidity is not None and temperature is
notNone:
               print('Temp={0:0.1f}*CHumidity={1:0.1f}%'.format(t
emperature,humidity))


        #SendhumidityandtemperaturefeedstoadafruitIOtempera

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

                   aio.send(temperature_feed.key,str(temper

ature))

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

)                  else:


        print('FailedtogetDHT22Reading,tryingagainin',DHT_READ_TIMEO
UT,'seconds')

    #Timeouttoavoidflooding Adafruit IOtime.

sleep(DHT_READ_TIMEOUT)
```