

SMART WASTE MANAGEMENT SYSTEM

Assignment-2

Build a Python code, Assume you get temperature and humidity values and write a condition to continuously detect alarm in case of high temperature.

CODE

```
# 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 use
```

```

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 IOtemperature =
'%.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,tryingagaininDHT_READ_TIMEOUT,'second')
# Timeout to avoid flooding Adafruit IO
time.sleep(DHT_READ_TIMEOUT)

```