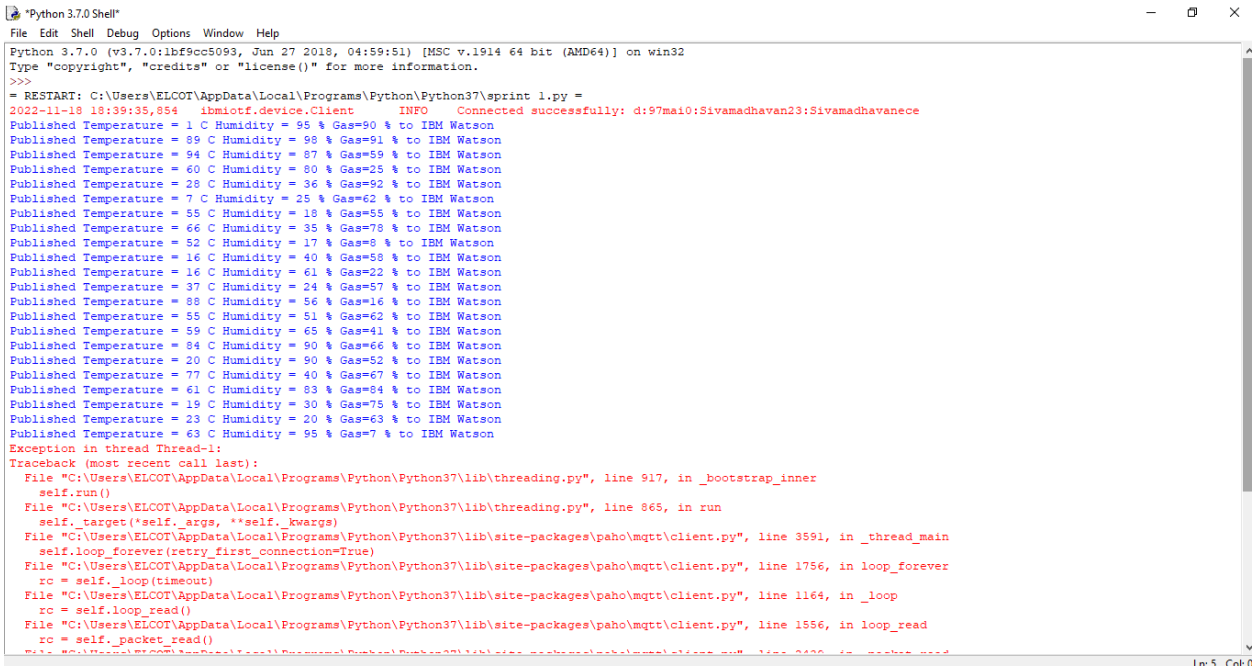
SPRINT-1

TO OBTAIN PARAMETERS LIKE TEMPERATURE,HUMIDITY AND GAS.

PYTHON CODE:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "97mai0"
deviceType = "Sivamadhavan23"
deviceId = "Sivamadhavanece"
authMethod = "token"
authToken = "I)&NoyRn-DUOO(*4yn"


try:

  deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method":
authMethod, "auth-token": authToken}
  deviceCli = ibmiotf.device.Client(deviceOptions)
#.....................................

except Exception as e:

 print("Caught exception connecting device: %s" % str(e))
 sys.exit()
# Connect and send a datapoint "hello" with value "world" into the cloud as an event of
type "greeting" 10 times

deviceCli.connect()

while True:

    #Get Sensor Data from DHT22
    Temperature=random.randint(0,100)
    Humidity=random.randint(0,100)
```

```
    Gas=random.randint(0,100)

    data = { 'Temperature' : Temperature, 'Humidity': Humidity, 'Gas': Gas}

    # print data

    def myOnPublishCallback():

      print ("Published Temperature = %s C" % Temperature, "Humidity = %s %%" %
Humidity, "Gas=%s %%" % Gas, "to IBM Watson")

    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,
on_publish=myOnPublishCallback)
    if not success:

      print("Not connected to IoTF")

    time.sleep(10)
```


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\ELCOT\AppData\Local\Programs\Python\Python37\sprint 1.py =
2022-11-18 18:39:35,854 ibmiotf.device.Client INFO Connected successfully: d:97mai0:Sivamadhavan23:Sivamadhavanece
Published Temperature = 1 C Humidity = 95 % Gas=90 % to IBM Watson
Published Temperature = 89 C Humidity = 98 % Gas=91 % to IBM Watson
Published Temperature = 94 C Humidity = 87 % Gas=59 % to IBM Watson
Published Temperature = 60 C Humidity = 80 % Gas=25 % to IBM Watson
Published Temperature = 28 C Humidity = 36 % Gas=92 % to IBM Watson
Published Temperature = 7 C Humidity = 25 % Gas=62 % to IBM Watson
Published Temperature = 55 C Humidity = 18 % Gas=55 % to IBM Watson
Published Temperature = 66 C Humidity = 35 % Gas=78 % to IBM Watson
Published Temperature = 52 C Humidity = 17 % Gas=8 % to IBM Watson
Published Temperature = 16 C Humidity = 40 % Gas=58 % to IBM Watson
Published Temperature = 16 C Humidity = 61 % Gas=22 % to IBM Watson
Published Temperature = 37 C Humidity = 24 % Gas=57 % to IBM Watson
Published Temperature = 88 C Humidity = 56 % Gas=16 % to IBM Watson
Published Temperature = 55 C Humidity = 51 % Gas=62 % to IBM Watson
Published Temperature = 59 C Humidity = 65 % Gas=41 % to IBM Watson
Published Temperature = 84 C Humidity = 90 % Gas=66 % to IBM Watson
Published Temperature = 20 C Humidity = 90 % Gas=52 % to IBM Watson
Published Temperature = 77 C Humidity = 40 % Gas=67 % to IBM Watson
Published Temperature = 61 C Humidity = 83 % Gas=84 % to IBM Watson
Published Temperature = 19 C Humidity = 30 % Gas=75 % to IBM Watson
Published Temperature = 23 C Humidity = 20 % Gas=63 % to IBM Watson
Published Temperature = 63 C Humidity = 95 % Gas=7 % to IBM Watson
Exception in thread Thread-1:
Traceback (most recent call last):
File "C:\Users\ELCOT\AppData\Local\Programs\Python\Python37\lib\threading.py", line 917, in _bootstrap_inner
self.run()
File "C:\Users\ELCOT\AppData\Local\Programs\Python\Python37\lib\threading.py", line 865, in run
self._target(*self._args, **self._kwargs)
File "C:\Users\ELCOT\AppData\Local\Programs\Python\Python37\lib\site-packages\paho\mqtt\client.py", line 3591, in _thread_main
self.loop_forever(retry_first_connection=True)
File "C:\Users\ELCOT\AppData\Local\Programs\Python\Python37\lib\site-packages\paho\mqtt\client.py", line 1756, in loop_forever
rc = self._loop(timeout)
File "C:\Users\ELCOT\AppData\Local\Programs\Python\Python37\lib\site-packages\paho\mqtt\client.py", line 1164, in _loop
rc = self.loop_read()
File "C:\Users\ELCOT\AppData\Local\Programs\Python\Python37\lib\site-packages\paho\mqtt\client.py", line 1556, in loop_read
rc = self._packet_read()