Prerequisites

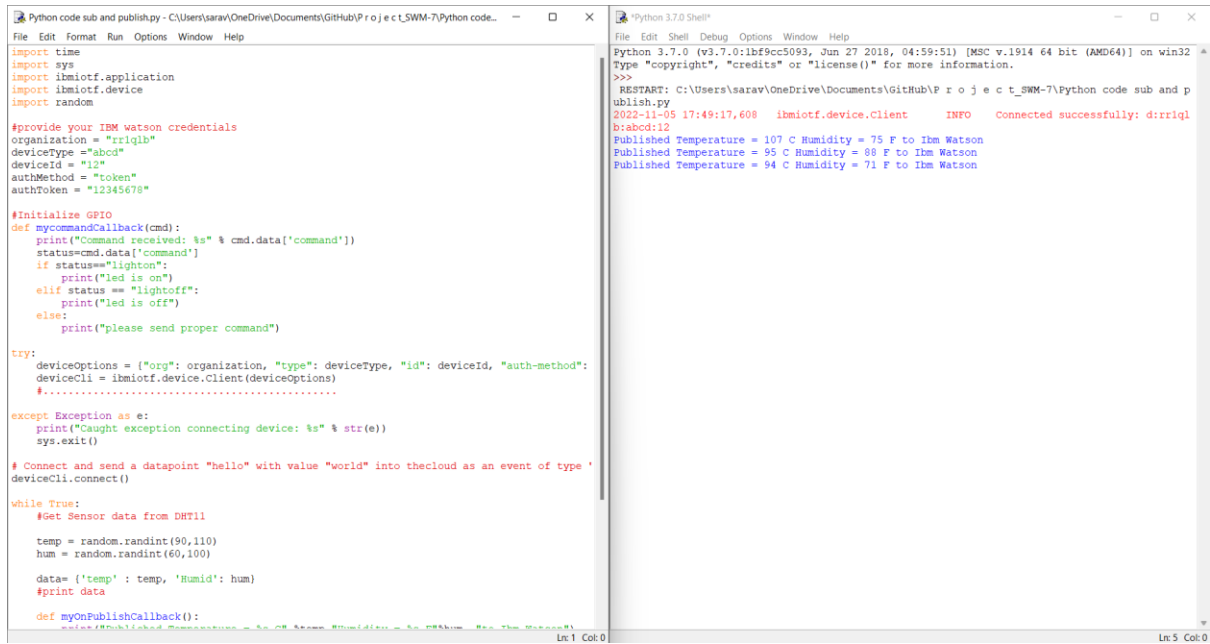| Date	20-10-2022
Team Id	PNT2022TMID22482
Project Name	Project -Smart Waste Management System for Metropolitan Cities
Team leader name	Saravanan G

IBM Cloud:
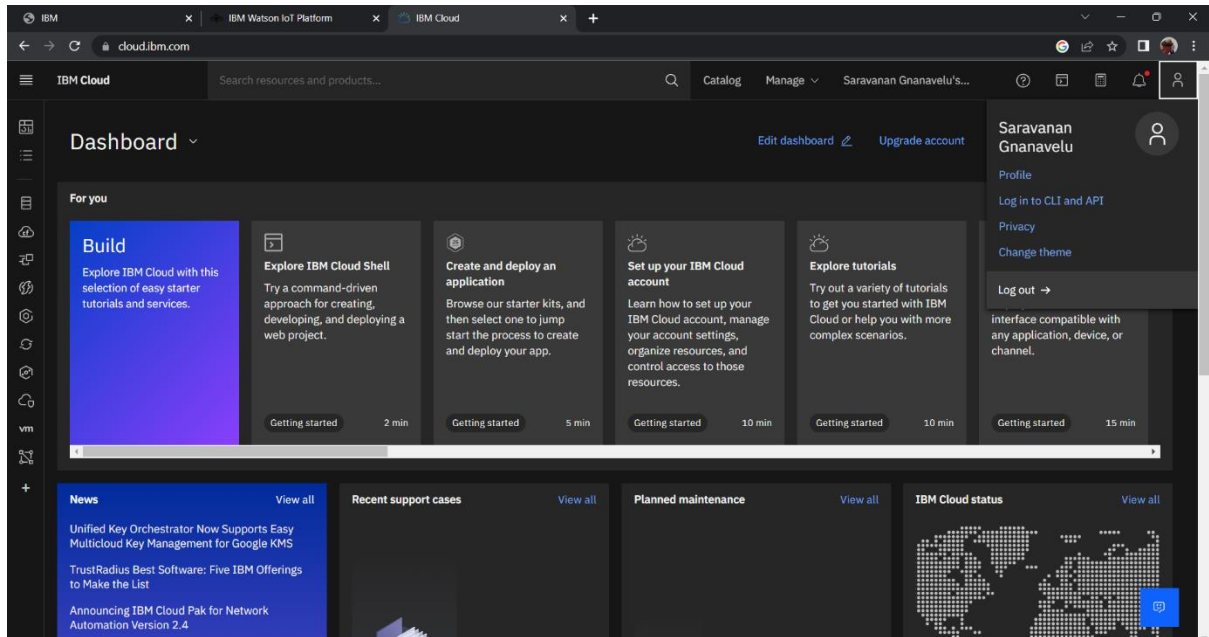
IBM Watson IoT Platform:
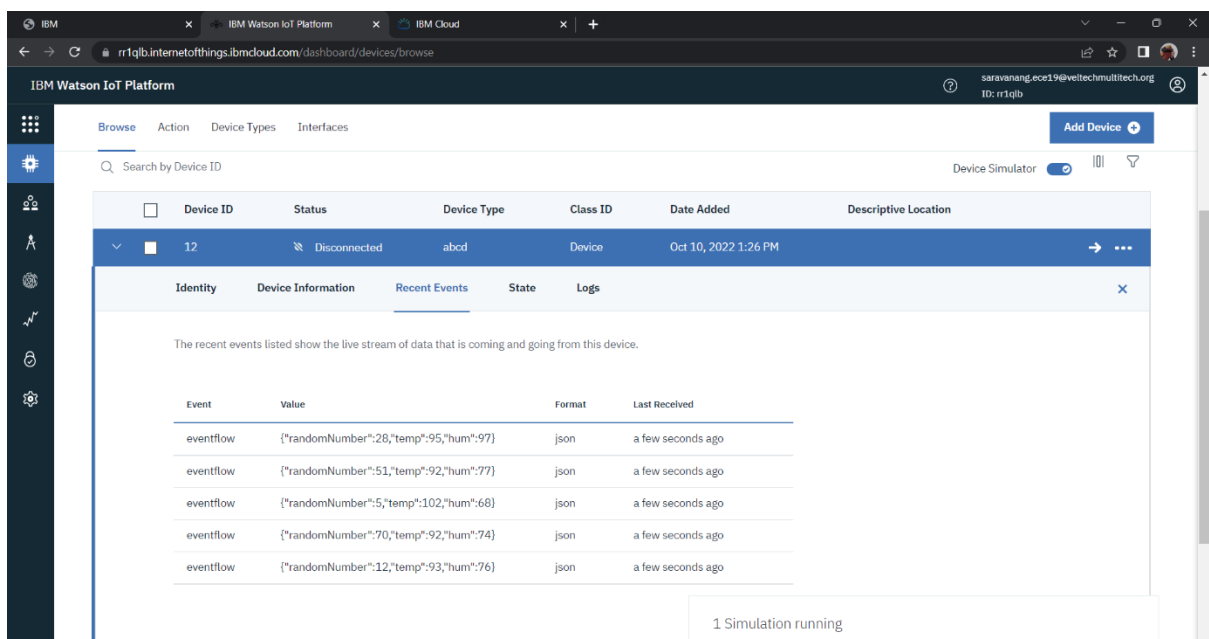
Python software:

Left window — *Python code sub and publish.py - C:\Users\sarav\OneDrive\Documents\GitHub\P r o j e c t_SWM-7\Python code...*

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

#provide your IBM watson credentials
organization = "rr1qlb"
deviceType ="abcd"
deviceId = "12"
authMethod = "token"
authToken = "12345678"

#Initialize GPIO
def mycommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print("led is on")
    elif status == "lightoff":
        print("led is off")
    else:
        print("please send proper command")

try:
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method":
    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 thecloud as an event of type '
deviceCli.connect()

while True:
    #Get Sensor data from DHT11

    temp = random.randint(90,110)
    hum = random.randint(60,100)

    data= {'temp' : temp, 'Humid': hum}
    #print data

    def myOnPublishCallback():
```

Ln: 1 Col: 0

Right window — *Python 3.7.0 Shell*

```
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\sarav\OneDrive\Documents\GitHub\P r o j e c t_SWM-7\Python code sub and p
ublish.py
2022-11-05 17:49:17,608   ibmiotf.device.Client      INFO    Connected successfully: d:rr1ql
b:abcd:12
Published Temperature = 107 C Humidity = 75 F to Ibm Watson
Published Temperature = 95 C Humidity = 88 F to Ibm Watson
Published Temperature = 94 C Humidity = 71 F to Ibm Watson
```

Ln: 5 Col: 0