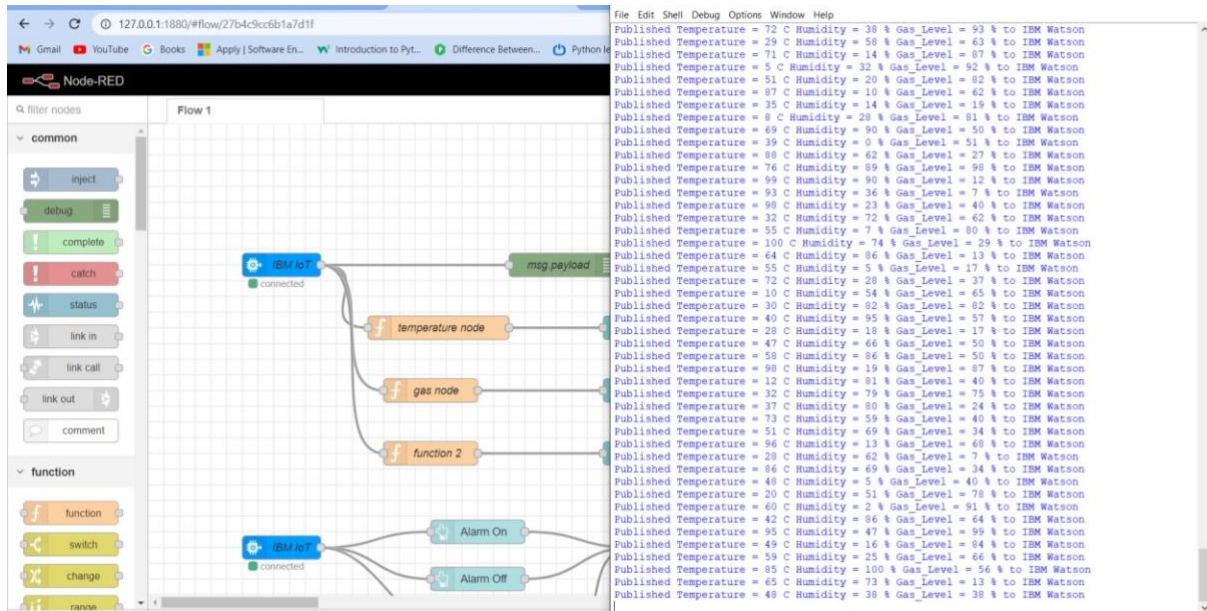


Develop A Python Script To Publish And Subscribe To IBM IoT Platform

Publish Data To The IBM Cloud

Date	5 November 2022
Team ID	PNT2022TMID41330
Project Name	Project – Gas leakage monitoring and alerting system for industries



```
File Edit Format Run Options Window Help
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

# Provide your IBM Watson Device Credentials
organization = "eq4ony"
deviceType = "PNT2022TMID47483"
deviceId = "PNT2022TMID47483DEVICEID"
authMethod = "token"
authToken = "0V20xSRfLzHADNKjbl"

# Initialize GPIO

def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data["command"])
    status=cmd.data["command"]
    if status=="alarmon":
        print ("Alarm is on")
    elif (status == "alarmoff") :
        print ("Alarm is off")
    elif status == "sprinkleron":
        print("Sprinkler is ON")
    elif status == "sprinkleroff":
        print("Sprinkler is OFF")
    #print(cmd)

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
deviceCli.connect()

while True:
    #Get Sensor Data from DHT11
    Published Temperature = 72 C Humidity = 38 % Gas Level = 93 % to IBM Watson
    Published Temperature = 29 C Humidity = 58 % Gas Level = 63 % to IBM Watson
    Published Temperature = 71 C Humidity = 14 % Gas Level = 87 % to IBM Watson
    Published Temperature = 5 C Humidity = 32 % Gas Level = 92 % to IBM Watson
    Published Temperature = 51 C Humidity = 20 % Gas Level = 82 % to IBM Watson
    Published Temperature = 87 C Humidity = 10 % Gas Level = 62 % to IBM Watson
    Published Temperature = 35 C Humidity = 14 % Gas Level = 19 % to IBM Watson
    Published Temperature = 8 C Humidity = 28 % Gas Level = 81 % to IBM Watson
    Published Temperature = 69 C Humidity = 90 % Gas Level = 50 % to IBM Watson
    Published Temperature = 39 C Humidity = 0 % Gas Level = 51 % to IBM Watson
    Published Temperature = 88 C Humidity = 62 % Gas Level = 27 % to IBM Watson
    Published Temperature = 76 C Humidity = 89 % Gas Level = 98 % to IBM Watson
    Published Temperature = 99 C Humidity = 90 % Gas Level = 12 % to IBM Watson
    Published Temperature = 93 C Humidity = 36 % Gas Level = 7 % to IBM Watson
    Published Temperature = 98 C Humidity = 23 % Gas Level = 40 % to IBM Watson
    Published Temperature = 32 C Humidity = 72 % Gas Level = 62 % to IBM Watson
    Published Temperature = 55 C Humidity = 7 % Gas Level = 80 % to IBM Watson
    Published Temperature = 100 C Humidity = 74 % Gas Level = 29 % to IBM Watson
    Published Temperature = 64 C Humidity = 86 % Gas Level = 13 % to IBM Watson
    Published Temperature = 55 C Humidity = 5 % Gas Level = 17 % to IBM Watson
    Published Temperature = 28 C Humidity = 46 % Gas Level = 50 % to IBM Watson
    Published Temperature = 10 C Humidity = 54 % Gas Level = 65 % to IBM Watson
    Published Temperature = 30 C Humidity = 82 % Gas Level = 82 % to IBM Watson
    Published Temperature = 40 C Humidity = 95 % Gas Level = 57 % to IBM Watson
    Published Temperature = 28 C Humidity = 18 % Gas Level = 17 % to IBM Watson
    Published Temperature = 47 C Humidity = 46 % Gas Level = 50 % to IBM Watson
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    Published Temperature = 48 C Humidity = 5 % Gas Level = 40 % to IBM Watson
    Published Temperature = 20 C Humidity = 51 % Gas Level = 78 % to IBM Watson
    Published Temperature = 60 C Humidity = 2 % Gas Level = 91 % to IBM Watson
    Published Temperature = 42 C Humidity = 96 % Gas Level = 44 % to IBM Watson
    Published Temperature = 95 C Humidity = 47 % Gas Level = 59 % to IBM Watson
    Published Temperature = 49 C Humidity = 16 % Gas Level = 84 % to IBM Watson
    Published Temperature = 59 C Humidity = 25 % Gas Level = 66 % to IBM Watson
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