Develop a python script

Date	17 September 2022
Team ID	PNT2022TMID30709
Project Name	Project - Industry-Specific Intelligent Fire Management System

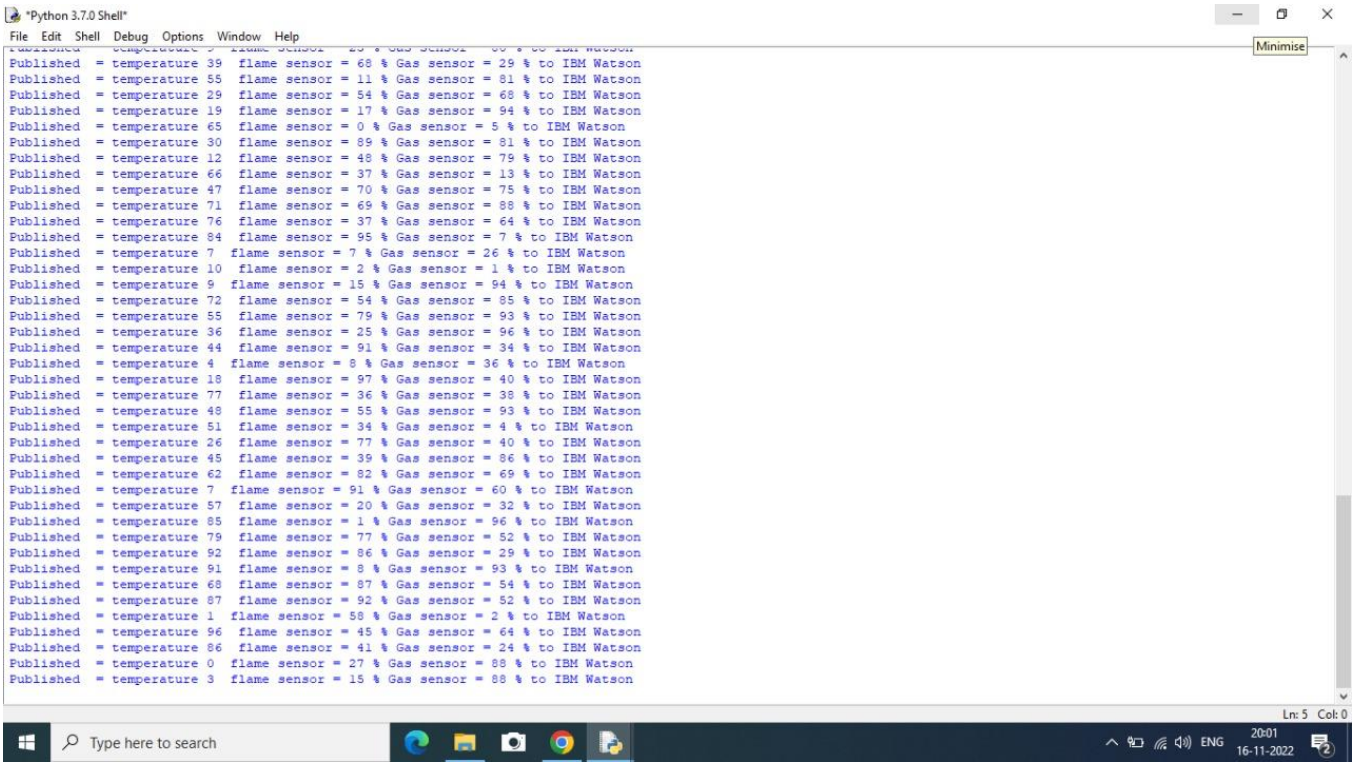
Python script for generating the random sensor values - Temperature, Flame Level and Gas Level to the IBM Watson IoT Platform.

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



#Provide your IBM Watson Device Credentials
organization = "ilph7t"
deviceType = "910019104702"
deviceId = "910019104702"
authMethod = "token"
authToken = "-hht6G8AmqCPZN?Cgt"


# Initialize GPIO



def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("fan is on")
    else :
        print ("fan 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 "greeting" 10 times
deviceCli.connect()


while True:
    #Get Sensor Data from DHT11


    temperature=random.randint(0,100)
    flamesensor=random.randint(0,100)
    Gassensor=random.randint(0,100)


    data = { 'temperature' : temperature , 'flame sensor': flamesensor ,'Gas sensor': Gassensor }
    #print data
    def myOnPublishCallback():
      print ("Published  = temperature %s " % temperature  , "flame sensor = %s %%" %flamesensor , "Gas sensor = %s %%" % Gassensor, "to IBM Watson")


    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,
```

```
on_publish=myOnPublishCallback)
        if not success:
            print("Not connected to IoTF")
        time.sleep(1)

        deviceCli.commandCallback = myCommandCallback

# Disconnect the device and application from the cloud
deviceCli.disconnect()
```

Output :


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Minimise
Published = temperature 39 flame sensor = 68 % Gas sensor = 29 % to IBM Watson
Published = temperature 55 flame sensor = 11 % Gas sensor = 81 % to IBM Watson
Published = temperature 29 flame sensor = 54 % Gas sensor = 68 % to IBM Watson
Published = temperature 19 flame sensor = 17 % Gas sensor = 94 % to IBM Watson
Published = temperature 65 flame sensor = 0 % Gas sensor = 5 % to IBM Watson
Published = temperature 30 flame sensor = 89 % Gas sensor = 81 % to IBM Watson
Published = temperature 12 flame sensor = 48 % Gas sensor = 79 % to IBM Watson
Published = temperature 66 flame sensor = 37 % Gas sensor = 13 % to IBM Watson
Published = temperature 47 flame sensor = 70 % Gas sensor = 75 % to IBM Watson
Published = temperature 71 flame sensor = 69 % Gas sensor = 88 % to IBM Watson
Published = temperature 76 flame sensor = 37 % Gas sensor = 64 % to IBM Watson
Published = temperature 84 flame sensor = 95 % Gas sensor = 7 % to IBM Watson
Published = temperature 7 flame sensor = 7 % Gas sensor = 26 % to IBM Watson
Published = temperature 10 flame sensor = 2 % Gas sensor = 1 % to IBM Watson
Published = temperature 9 flame sensor = 15 % Gas sensor = 94 % to IBM Watson
Published = temperature 72 flame sensor = 54 % Gas sensor = 85 % to IBM Watson
Published = temperature 55 flame sensor = 79 % Gas sensor = 93 % to IBM Watson
Published = temperature 36 flame sensor = 25 % Gas sensor = 96 % to IBM Watson
Published = temperature 44 flame sensor = 91 % Gas sensor = 34 % to IBM Watson
Published = temperature 4 flame sensor = 8 % Gas sensor = 36 % to IBM Watson
Published = temperature 18 flame sensor = 97 % Gas sensor = 40 % to IBM Watson
Published = temperature 77 flame sensor = 36 % Gas sensor = 38 % to IBM Watson
Published = temperature 48 flame sensor = 55 % Gas sensor = 93 % to IBM Watson
Published = temperature 51 flame sensor = 34 % Gas sensor = 4 % to IBM Watson
Published = temperature 26 flame sensor = 77 % Gas sensor = 40 % to IBM Watson
Published = temperature 45 flame sensor = 39 % Gas sensor = 86 % to IBM Watson
Published = temperature 62 flame sensor = 82 % Gas sensor = 69 % to IBM Watson
Published = temperature 7 flame sensor = 91 % Gas sensor = 60 % to IBM Watson
Published = temperature 57 flame sensor = 20 % Gas sensor = 32 % to IBM Watson
Published = temperature 85 flame sensor = 1 % Gas sensor = 96 % to IBM Watson
Published = temperature 79 flame sensor = 77 % Gas sensor = 52 % to IBM Watson
Published = temperature 92 flame sensor = 86 % Gas sensor = 29 % to IBM Watson
Published = temperature 91 flame sensor = 8 % Gas sensor = 93 % to IBM Watson
Published = temperature 68 flame sensor = 87 % Gas sensor = 54 % to IBM Watson
Published = temperature 87 flame sensor = 92 % Gas sensor = 52 % to IBM Watson
Published = temperature 1 flame sensor = 58 % Gas sensor = 2 % to IBM Watson
Published = temperature 96 flame sensor = 45 % Gas sensor = 64 % to IBM Watson
Published = temperature 86 flame sensor = 41 % Gas sensor = 24 % to IBM Watson
Published = temperature 0 flame sensor = 27 % Gas sensor = 88 % to IBM Watson
Published = temperature 3 flame sensor = 15 % Gas sensor = 88 % to IBM Watson
Ln: 5 Col: 0
Type here to search
ENG
20:01
16-11-2022