SPRINT-1

Date	19 November 2022
Team ID	PNT2022TMID06181
Project Name	Project – Smart Farmer- IOT Enabled Smart Farming Application

PYTHON CODE:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Waston Device Credentials
organization="b76hg0"
deviceType="avpdk12"
deviceId="abcd"
authMethod="token"
authToken="123456789"
# Initialize GPIO
def myCommandCallback(cmd):
    print("message received from IBM Iot platform: %s" %
cmd.data['command'])
    status=cmd.data['command']
    if status=="motoron":
        print ("motor is on")
    elif status == "motoroff":
        print ("motor is off")
    else :
        print ("please send proper command")
```

```
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()
deviceCli.connect()
while True:
    #Get Sensor Data from DHT11
    temp=random.randint(0,100)
    Humid=random.randint(40,100)
    Mois=random.randint(10,110)
    data = { 'temp' : temp, 'Humid': Humid , 'Mois': Mois}
    #print data          def myOnPublishCallback():
    def myOnPublishCallback():
        print("Published Temperature = %s C" % temp, "Humidity = %s %%" %
Humid, "Moisture =%s deg c" % Mois, "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)
```

deviceCli.commandCallback = myCommandCallback

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

deviceCli.disconnect()

OUTPUT: