SRI SAIRAM ENGINEERING COLLEGE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SMART FARMER – IoT ENABLED SMART FARMING APPLICATION

IBM NALAIYATHIRAN

SPRINT-2

TITLE	Smart Farmer – IoT enabled Smart Farming Application
DOMAIN NAME	Internet of Things
TEAM ID	PNT2022TMID04114
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PROGRAM:

```python
import wiotp.sdk.device

import time

import os

import datetime

import random

myConfig = {

    "identity": {

        "orgId": "0ooi4r",

        "typeId": "Device0",

        "deviceId": "262605" ,

    }

    "auth": {

        "token": "098765432"

    }

}

client = wiotp.sdk.device.DeviceClient(config=myConfig,
logHandlers=None)

client.connect()
```

```python
def myCommandCallback(cmd):
    print("Message received from IBM IOT platform: %s" % cmd.data['command'])
    m=cmd.data['command']
    if(m=="motoron"):
        print("Motor is switched on")
    elif(m=="motoroff"):
        print("Motor is switched off")
    print(" ")


while True:
    soil=ramdom.randint(0,100)
    temp=ramdom.randint(-20,125)
    hum=ramdom.randint(0,100)
    myData={'soil moisture': soil, 'temperature':temp, 'humidity':hum}
    clint.publishEvent(eventId="status", msgFormat="json",data=myData, qos=0,onPublish=None)
    print("Published data Successfully: %s", myData)
    time.sleep(2)
    client.commandCallback = myCommandCallback
client.disconnect()
```

```
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\A S ABISHEK\AppData\Local\Programs\Python\Python37\Smart_Farming.py
2022-11-06 01:11:23,500   wiotp.sdk.device.client.DeviceClient  INFO   Connected successfully: d:uq23sr:Smart_Farming:32826Published
data successfully: %s
 {'soil_moisture': 83, 'temperature': 29, 'humiduty': 36}
Published data successfully: %s {'soil_moisture': 47, 'temperature': 96, 'humiduty': 25}
Published data successfully: %s {'soil_moisture': 45, 'temperature': 5, 'humiduty': 49}
Published data successfully: %s {'soil_moisture': 82, 'temperature': 29, 'humiduty': 80}
Published data successfully: %s {'soil_moisture': 92, 'temperature': 49, 'humiduty': 86}
Published data successfully: %s {'soil_moisture': 60, 'temperature': 11, 'humiduty': 98}
Published data successfully: %s {'soil_moisture': 40, 'temperature': -18, 'humiduty': 100}
Published data successfully: %s {'soil_moisture': 17, 'temperature': 80, 'humiduty': 33}
Published data successfully: %s {'soil_moisture': 60, 'temperature': 93, 'humiduty': 95}
Published data successfully: %s {'soil_moisture': 22, 'temperature': 15, 'humiduty': 70}
Published data successfully: %s {'soil_moisture': 78, 'temperature': 72, 'humiduty': 15}
Published data successfully: %s {'soil_moisture': 42, 'temperature': 41, 'humiduty': 63}
Published data successfully: %s {'soil_moisture': 21, 'temperature': 61, 'humiduty': 50}
Published data successfully: %s {'soil_moisture': 36, 'temperature': 95, 'humiduty': 56}
Published data successfully: %s {'soil_moisture': 14, 'temperature': 102, 'humiduty': 74}
Published data successfully: %s {'soil_moisture': 34, 'temperature': 31, 'humiduty': 44}
Published data successfully: %s {'soil_moisture': 95, 'temperature': 1, 'humiduty': 37}
Published data successfully: %s {'soil_moisture': 58, 'temperature': 61, 'humiduty': 97}
Published data successfully: %s {'soil_moisture': 94, 'temperature': 86, 'humiduty': 14}
Published data successfully: %s {'soil_moisture': 56, 'temperature': 89, 'humiduty': 82}
Published data successfully: %s {'soil_moisture': 100, 'temperature': -12, 'humiduty': 61}
Published data successfully: %s {'soil_moisture': 82, 'temperature': 63, 'humiduty': 41}
Published data successfully: %s {'soil_moisture': 30, 'temperature': 53, 'humiduty': 84}
Published data successfully: %s {'soil_moisture': 42, 'temperature': 83, 'humiduty': 71}
Published data successfully: %s {'soil_moisture': 80, 'temperature': 107, 'humiduty': 38}
Published data successfully: %s {'soil_moisture': 64, 'temperature': 14, 'humiduty': 73}
Published data successfully: %s {'soil_moisture': 95, 'temperature': 0, 'humiduty': 100}
Published data successfully: %s {'soil_moisture': 67, 'temperature': 124, 'humiduty': 21}
Published data successfully: %s {'soil_moisture': 51, 'temperature': 109, 'humiduty': 5}
Published data successfully: %s {'soil_moisture': 25, 'temperature': 35, 'humiduty': 58}
```