

VIT SMART BRIDGE IOT EXTERNSHIP PROGRAM

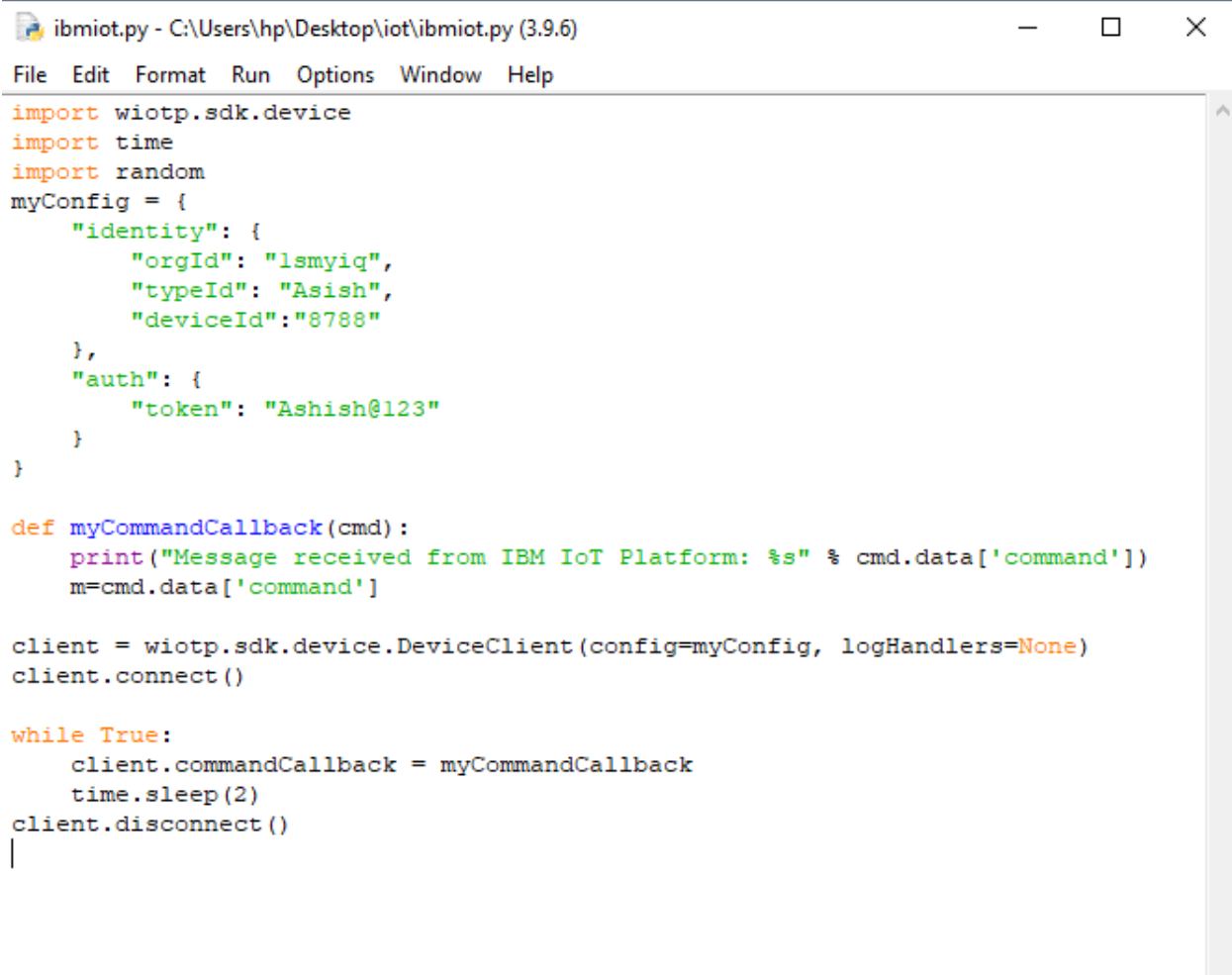
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Assignment-4:

Develop a mobile application that takes the user input and sends it to IoT device (python code). print the received data in python shell. Keep a text box to accept the user input. integrate a submit button. whenever user enters the text input in text box and clicks the button the data should be sent to IBM cloud using URL(HTTP API).

Python code:

A screenshot of a Python IDE window titled 'ibmiot.py - C:\Users\hp\Desktop\iot\ibmiot.py (3.9.6)'. The window has a menu bar with 'File', 'Edit', 'Format', 'Run', 'Options', 'Window', and 'Help'. The code is as follows:

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "lsmyiq",
        "typeId": "Asish",
        "deviceId": "8788"
    },
    "auth": {
        "token": "Ashish@123"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

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

while True:
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
|
```

```
import wiotp.sdk.device
import time
import random
```

```

myConfig = {
  "identity": {
    "orgId": "1smyiq",
    "typeId": "Asish",
    "deviceId": "8788"
  },
  "auth": {
    "token": "Ashish@123"
  }
}

```

```

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

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```

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

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```

while True:
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()

```

The screenshot displays the Node-RED web interface in a browser. The address bar shows the URL: <https://node-red-serzv-2021-07-09.eu-gb.mybluemix.net/red/#flow/f53ce424.444ee8>. The interface includes a left sidebar with a 'common' palette containing nodes like inject, debug, complete, catch, status, link in, link out, and comment, and a 'function' palette with function, switch, and change nodes. The main workspace shows a flow with two parallel paths. The top path starts with an 'IBM IoT' node (labeled 'connected'), followed by a 'msg payload' node. The bottom path starts with a '[get] /userdata' node, which then branches into two parallel nodes: 'IBM IoT' (labeled 'connected') and 'msg payload', both of which then connect to an 'http' node. On the right, a 'debug' console shows three log entries:

- 18/07/2021, 15:49:56 node: 10bf66dd.8118f9 msg.payload: Object { empty }
- 18/07/2021, 15:53:50 node: 10bf66dd.8118f9 msg.payload: Object { command: "hello people" }
- 18/07/2021, 15:55:07 node: 10bf66dd.8118f9 msg.payload: Object { command: "asish sumanth" }

 The bottom of the image shows a Windows taskbar with various application icons and a system clock indicating 3:59 PM on 7/18/2021.

Viewer



MIT APP INVENTOR

Projects • Connect • Build • Settings • Help • My Projects View Trash Guide Report an Issue English • sumanth.18bec7062@vitap.ac.in •

IBMIOT Screen1 Add Screen ... Remove Screen Publish to Gallery Designer Blocks

Palette Search Components...

User Interface

Layout

Media

Drawing and Animation

Maps

Sensors

- AccelerometerSensor
- BarcodeScanner
- Barometer
- Clock
- CyroscopeSensor
- Hygrometer
- LightSensor
- LocationSensor
- MagneticFieldSensor

Viewer

Display hidden components in Viewer

Phone size (505,320)

Screen1

USER DATA

SUBMIT

Components

- Screen1
- Label1
- TextBox1
- Button1
- Web1
- Clock1

Properties

TextBox1

BackgroundColor Default

Enabled ☒

FontBold ☐

FontItalic ☐

FontSize 14.0

FontTypeface default

Height Automatic

Width Fill parent

Hint Hint for TextBox1

MultiLine ☐

Rename Delete

Type here to search

ENG 4:05 PM 7/18/2021

Output:

3:55 HD 50%

Screen1

USER DATA

asish sumanth

SUBMIT

```
*IDLE Shell 3.9.6*
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\hp\Desktop\iot\ibmiot.py =====
2021-07-18 15:52:46,824 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:lsmyiq:Asish:8788
Message received from IBM IoT Platform: hello people
Message received from IBM IoT Platform: asish sumanth
|
```

18/07/2021, 15:49:56 node: 10bf66dd.8118f9

msg.payload : Object

{ empty }

18/07/2021, 15:53:50 node: 10bf66dd.8118f9

msg.payload : Object

▶ { command: "hello people" }

18/07/2021, 15:55:07 node: 10bf66dd.8118f9

msg.payload : Object

▶ { command: "asish sumanth" }