

# VIT-IOT

(INDUSTRY CERTIFICATE INTERNSHIP PROGRAM)

## ASSIGNMENT-4



**SMARTBRIDGE**  
Let's Bridge the Gap

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**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:**

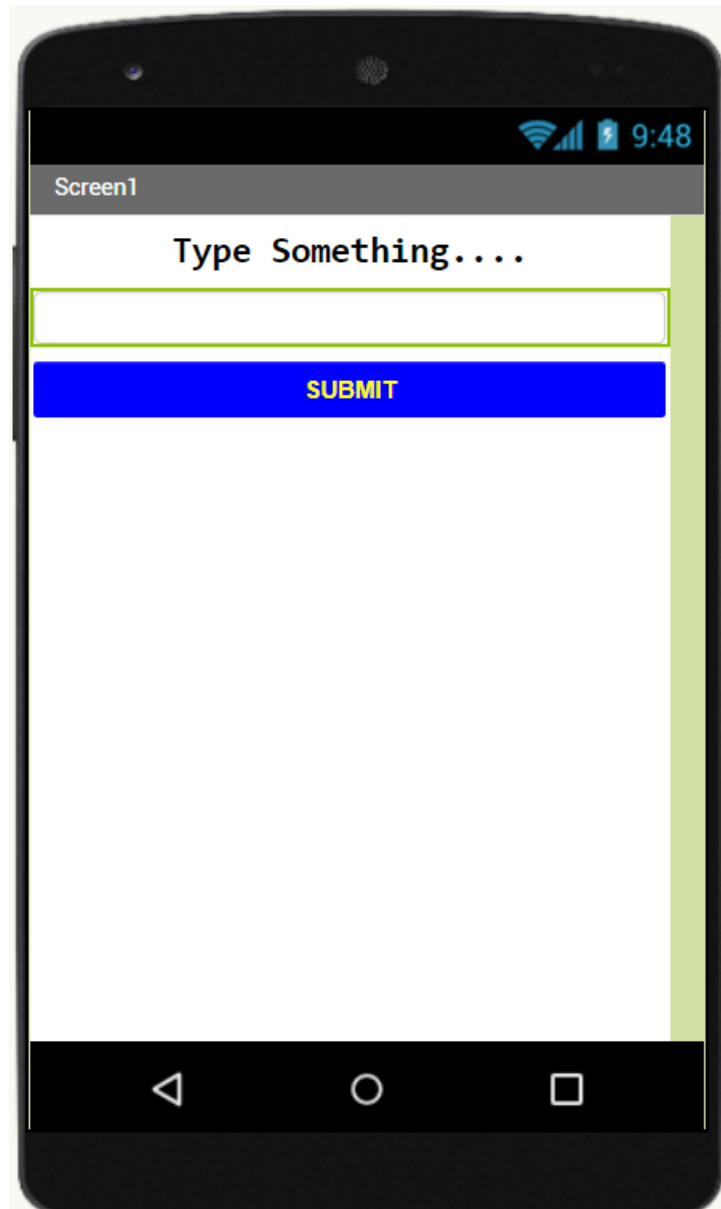
```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "d9cbnt",
        "typeId": "FirstDevice",
        "deviceId": "1752"
    },
    "auth": {
        "token": "Gopinath1752"
    }
}

def myCommandcallback (cmd):
    print("Message recieved from IBM IoT Platform: %s" % cmd.data['command'])
    #m=cma.data['Command']

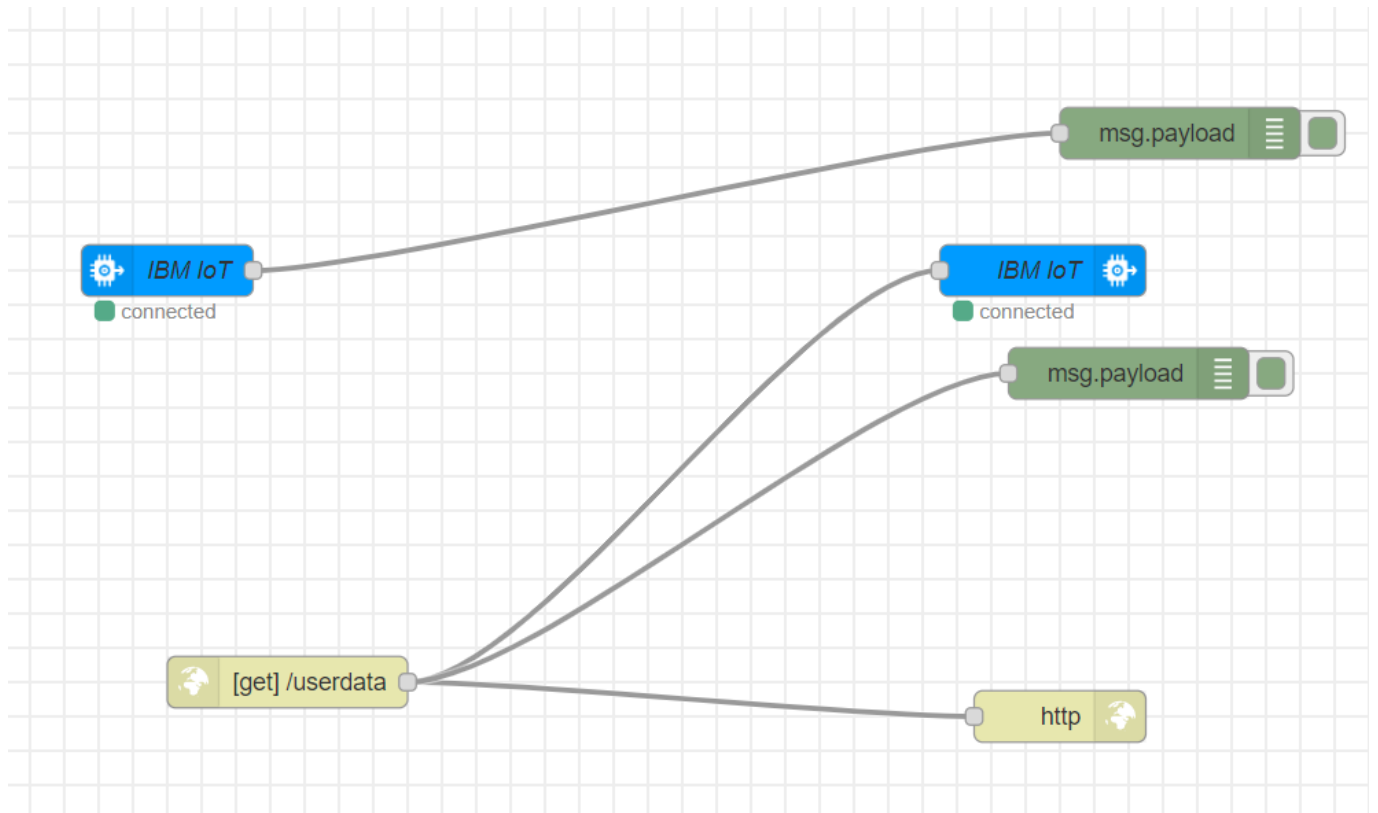
client = wiotp.sdk.device.Deviceclient (config=myconfig, logHandlers=None)
client.connect()

while True:
    client.commandcallback = mycommandcallback
    time.sleep (2)
    client.disconnect ()
```

**Fig.1 Python code window**



**Fig2. Application UI**



**Fig3. Node Red flow chart → In this The IBM IoT Node connects the Device with python code**

Screen/

Type Something....

hello world

SUBMIT

**Fig5: User Input given from mobile**

```
7/18/2021, 3:16:16 PM node: 5a87d33a.ef0cdc  
msg.payload : Object
```

```
▶ { command : " hello world" }
```

```
7/18/2021, 3:16:17 PM node: e92d61ae.a9c68  
iot-2/type/FirstDevice/id/14831/cmd/cmd/fmt/json :  
msg.payload : Object
```

```
▶ { command : " hello world" }
```

**Fig5: Data received successfully to the Node Red debug window**

```
RESTART: C:\Users\devina\Desktop\salvadoran\enrollment\assignment000.py  
2021-07-18 15:21:31,430 wiotp.sdk.device.client.DeviceClient INFO Connecte  
d successfully: d:d9cbnt:FirstDevice:14831  
Message received from IBM IoT Platform: hello world  
Message received from IBM IoT Platform: hello world  
|
```

**Fig.6. Python shell of Reciving Data**