

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).

CODE

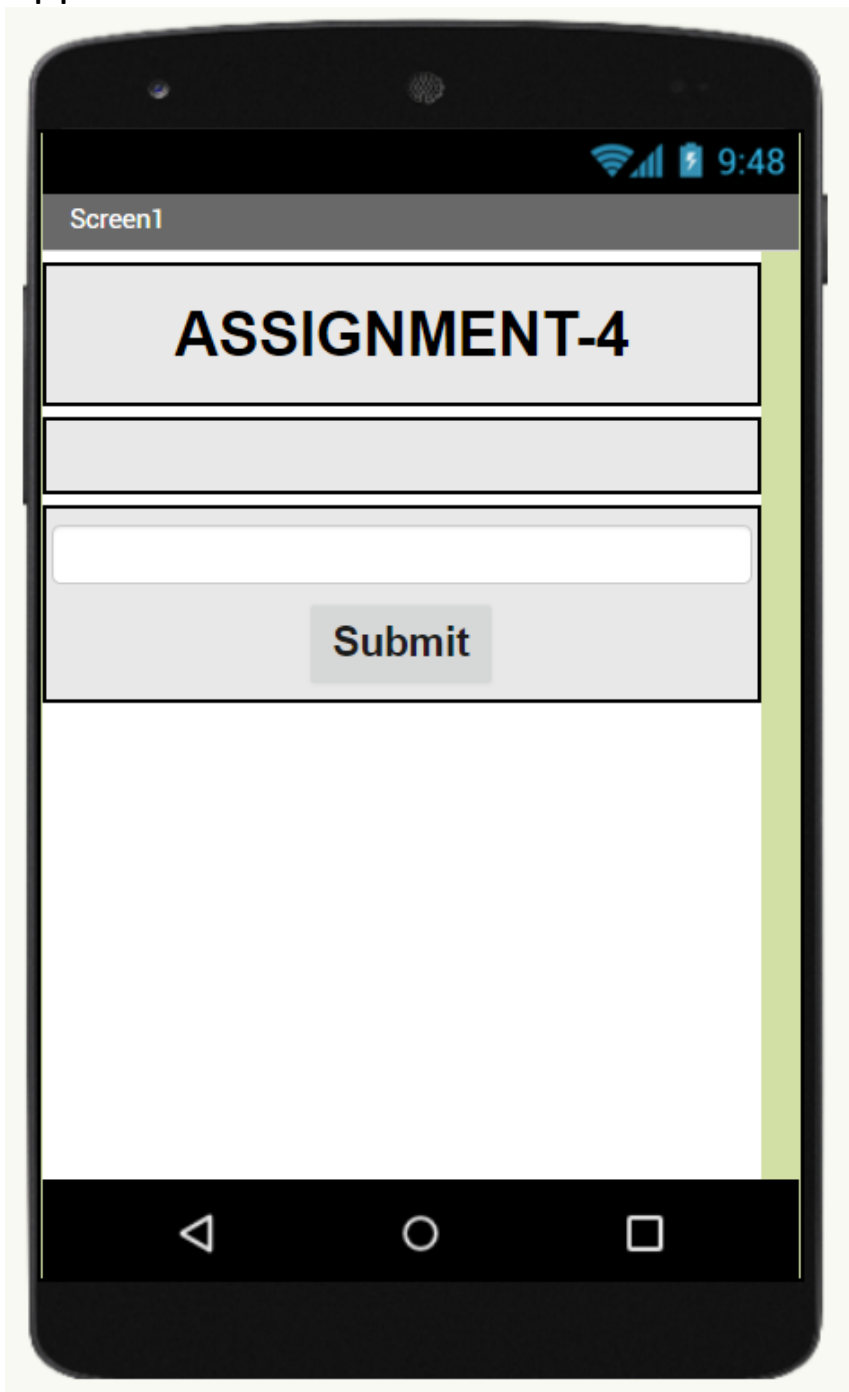
```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "mawtlg",
        "typeId": "VIT-IOT-device",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}

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

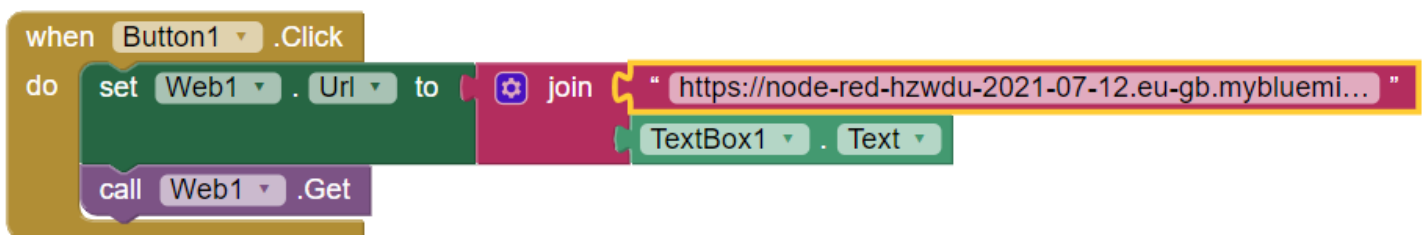
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

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

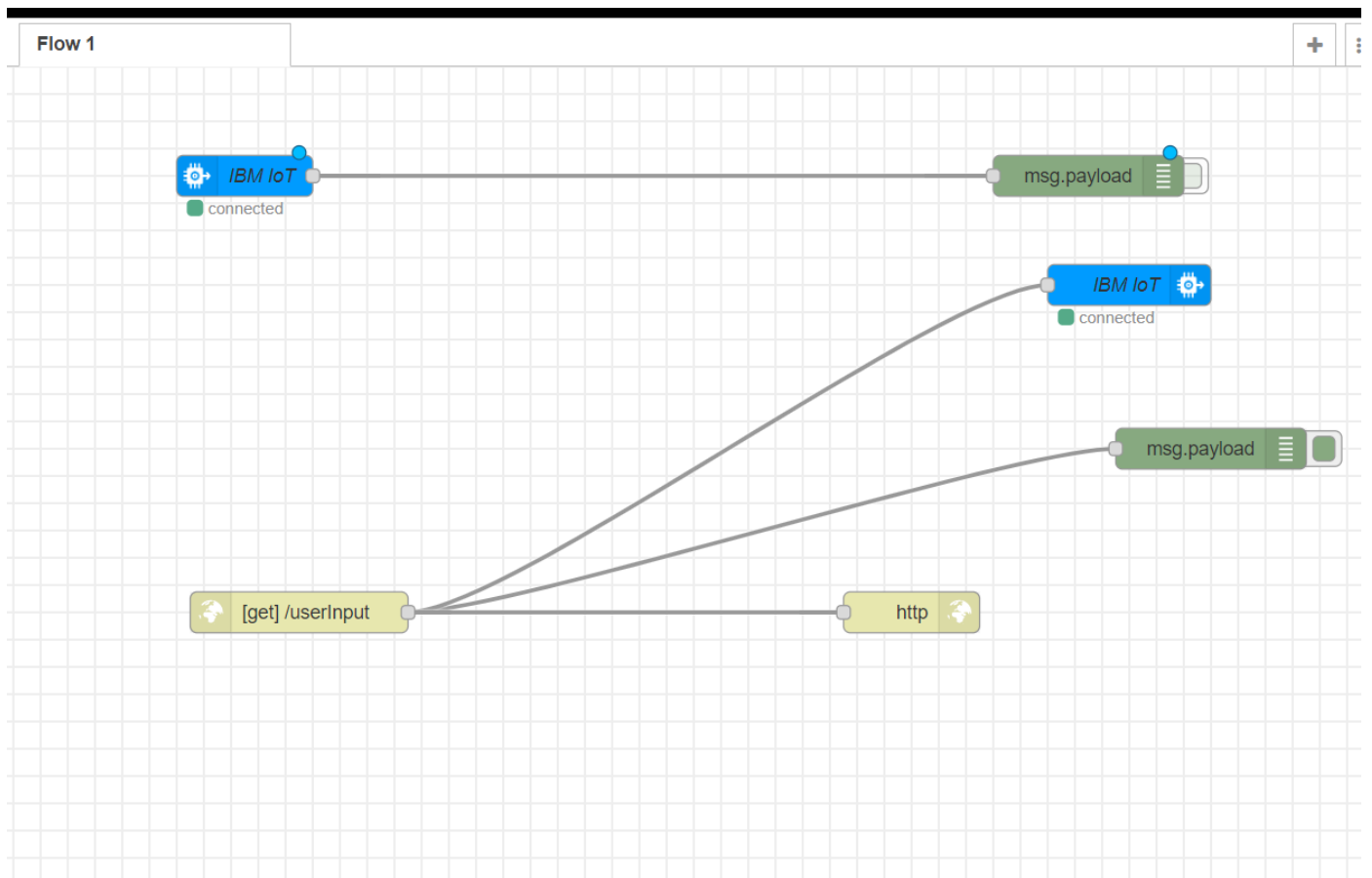
Application UI



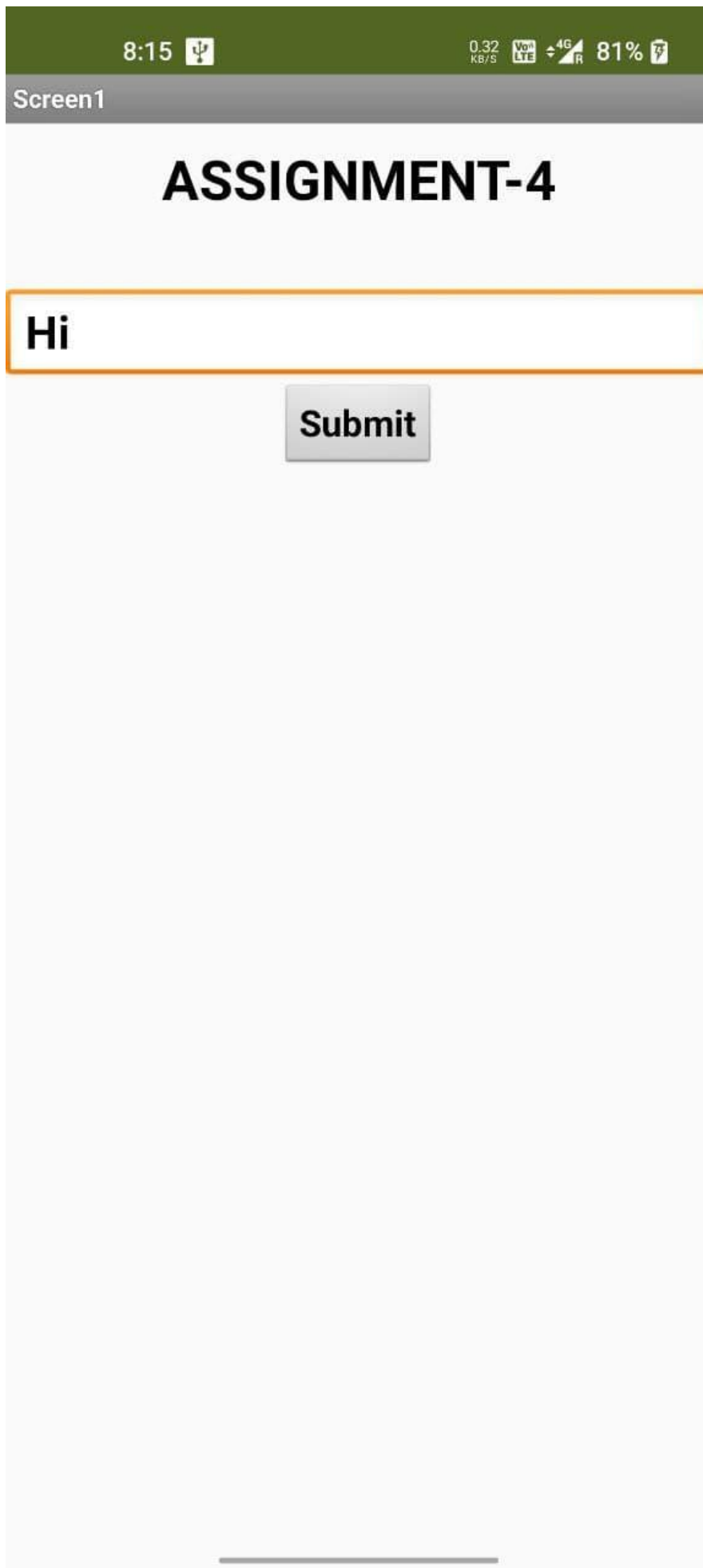
Blocks to function the above UI



Node-red Flow that connects the IBMIoT with the Application



Input through the App:



The screenshot shows a mobile application interface. At the top, there is a status bar with the time 8:15, a USB icon, data speed 0.32 KB/S, VoLTE and 4G LTE network indicators, and a battery level of 81%. Below the status bar is a grey header labeled "Screen1". The main content area has a light grey background and features the title "ASSIGNMENT-4" in large, bold, black capital letters. Below the title is a white text input field with an orange border, containing the text "Hi". Underneath the input field is a grey rectangular button with the word "Submit" in black text. A thin horizontal line is visible at the very bottom of the screen.

8:15



0.28
KB/S

Von
LTE

4G
R

81%



Screen1

ASSIGNMENT-4

Shivam Rajput

Submit



Rajput

Rajput's

Rajputs



q¹ w² e³ r⁴ t⁵ y⁶ u⁷ i⁸ o⁹ p⁰

a s d f g h j k l

↑ z x c v b n m ↵

?123

,

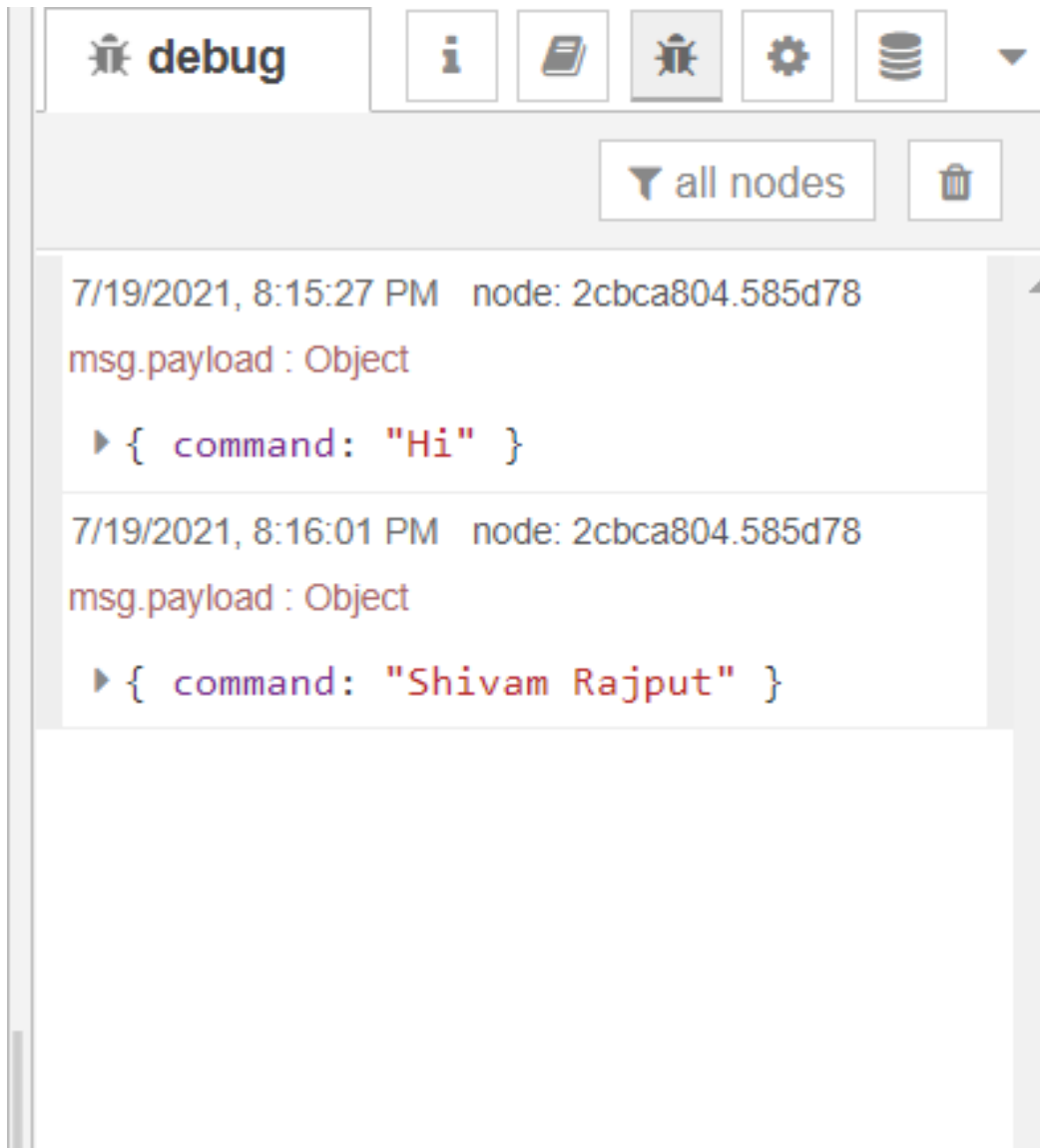


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Outputs:

Node-red Debug Screen:



Python shell:

The image shows a Python IDLE Shell window titled '*IDLE Shell 3.9.6*'. The menu bar includes 'File', 'Edit', 'Shell', 'Debug', 'Options', 'Window', and 'Help'. The shell displays the following text:

```
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\shiva\OneDrive\Desktop\fryfyyjtyjyh.py =====
2021-07-19 20:14:44,295 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:mawtlg:VIT-IOT-device:12345
Message received from IBM IoT Platform: Hi
Message received from IBM IoT Platform: Hi
Message received from IBM IoT Platform: Shivam Rajput
|
```