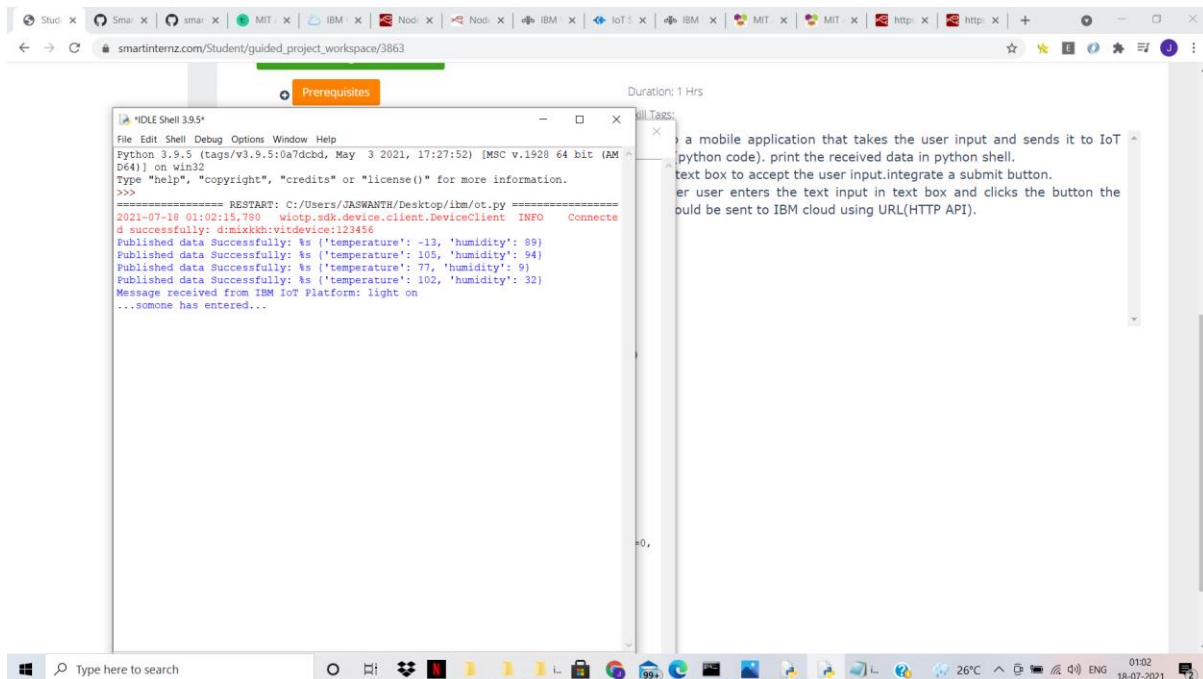


Develop a mobile application that takes the user input and sends it to IoT device (python code). print the received data in python shell.Keep a text box to accept the user input. integrate a submit button.whenever user enters the text input in text box and clicks the button the data should be sent to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

Mobile app:

The screenshot displays a mobile application interface with a green status bar at the top showing the time '1:02:28', signal strength, and battery level '98%'. Below the status bar is a grey header labeled 'Screen1'. The main content area is titled 'Sensor data' and contains two input fields. The first field is labeled 'temperature' and has the value '41'. The second field is labeled 'humidity' and has the value '96'. Below these fields are two buttons: 'LIGHT ON' and 'LIGHT OFF'.

When we pressed on light on button:

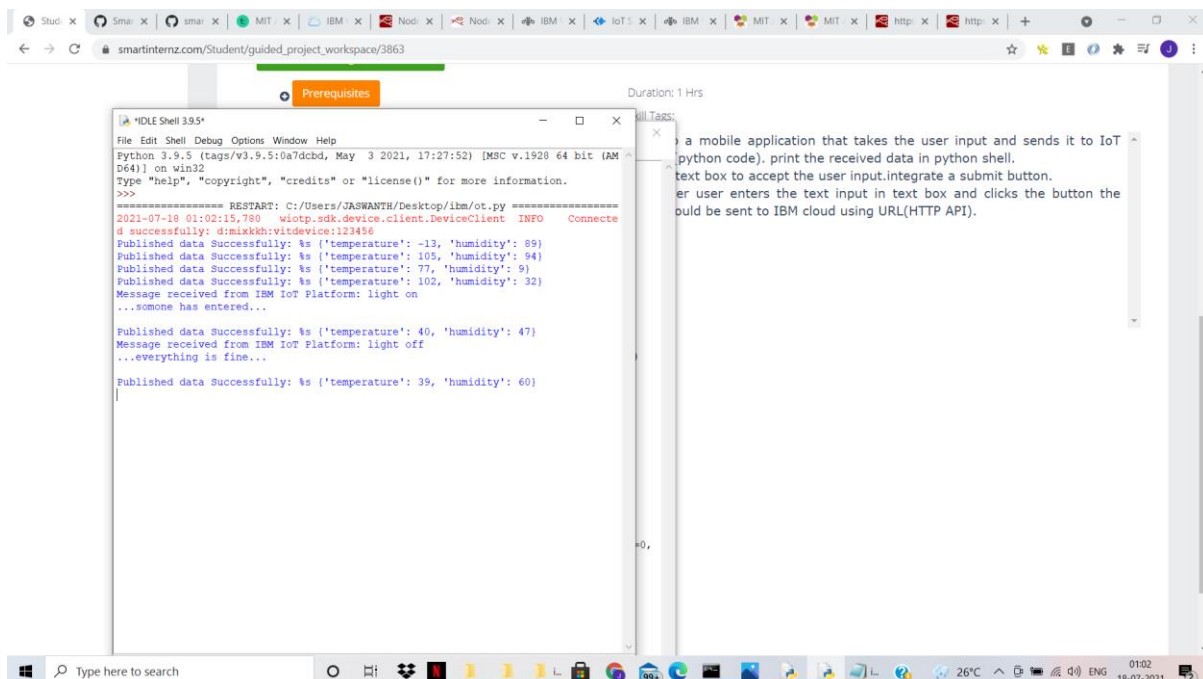


The screenshot shows a web browser window with the URL `smartinternz.com/Student/guided_project_workspace/3863`. The browser has multiple tabs open, including 'Studio', 'Sma', 'smar', 'MIT', 'IBM', 'Nodi', and 'http'. A 'Prerequisites' button is visible. A terminal window titled 'IDLE Shell 3.9.5' is open, showing the following output:

```
Python 3.9.5 (tags/v3.9.5:0a7dcb, May 3 2021, 17:27:52) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/JASWANTH/Desktop/ibm/ot.py =====
2021-07-18 01:02:15,780 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: dimixkh:viddevice:123456
Published data Successfully: %s ('temperature': -13, 'humidity': 89)
Published data Successfully: %s ('temperature': 105, 'humidity': 94)
Published data Successfully: %s ('temperature': 77, 'humidity': 9)
Published data Successfully: %s ('temperature': 102, 'humidity': 32)
Message received from IBM IoT Platform: light on
...someone has entered...
```

On the right, a mobile application interface is visible, showing a text box and a button. The text box contains the text: "a mobile application that takes the user input and sends it to IoT (python code). print the received data in python shell. text box to accept the user input.integrate a submit button. er user enters the text input in text box and clicks the button the buld be sent to IBM cloud using URL(HTTP API)." The button is labeled "Submit".

When we pressed light off button:



The screenshot shows the same web browser window as before, but the terminal window now displays the following output:

```
2021-07-18 01:02:15,780 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: dimixkh:viddevice:123456
Published data Successfully: %s ('temperature': -13, 'humidity': 89)
Published data Successfully: %s ('temperature': 105, 'humidity': 94)
Published data Successfully: %s ('temperature': 77, 'humidity': 9)
Published data Successfully: %s ('temperature': 102, 'humidity': 32)
Message received from IBM IoT Platform: light on
...someone has entered...
Published data Successfully: %s ('temperature': 40, 'humidity': 47)
Message received from IBM IoT Platform: light off
...everything is fine...
Published data Successfully: %s ('temperature': 39, 'humidity': 60)
```

The mobile application interface is still visible on the right, showing the same text box and button. The text box contains the text: "a mobile application that takes the user input and sends it to IoT (python code). print the received data in python shell. text box to accept the user input.integrate a submit button. er user enters the text input in text box and clicks the button the buld be sent to IBM cloud using URL(HTTP API)." The button is labeled "Submit".

Code:

```
import wiotp.sdk.device

import time

import random

myConfig = {
```

```

"identity": {
    "orgId": "mixkkh",
    "typeId": "vitdevice",
    "deviceId": "123456"
},
"auth": {
    "token": "12345678"
}
}

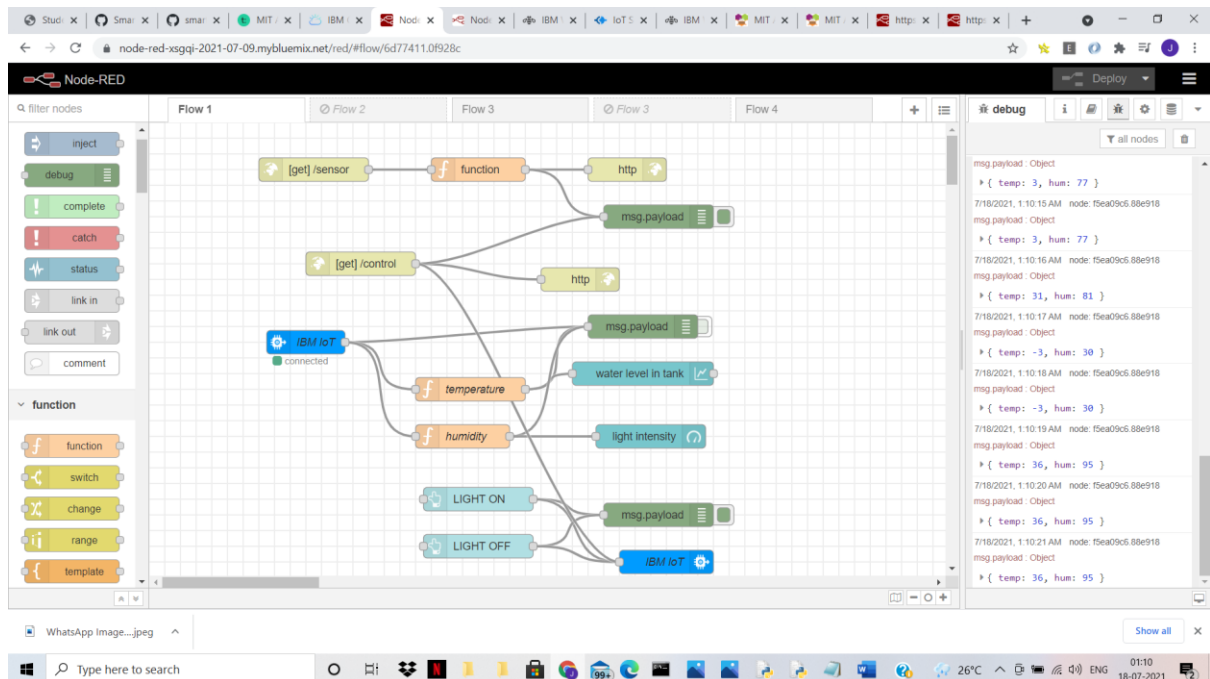
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']
    if (m=="light on"):
        print("...someone has entered...")
    elif(m=="light off"):
        print("...everything is fine...")
    print()

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

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

```

## Node red flow:



## Conclusion:

When in mobile application if we press light on button it prints someone has entered . If we press light off button it prints everything is fine in python shell .It displays as a message in python shell.