SPRINT 2

Dump the server/software to cloud

Team ID	PNT2022TMID52810
Project Name	Project - Signs with smart connectivity for Better road safety

Dump the code from Sprint 1 to cloud so it can be accessed from anywhere

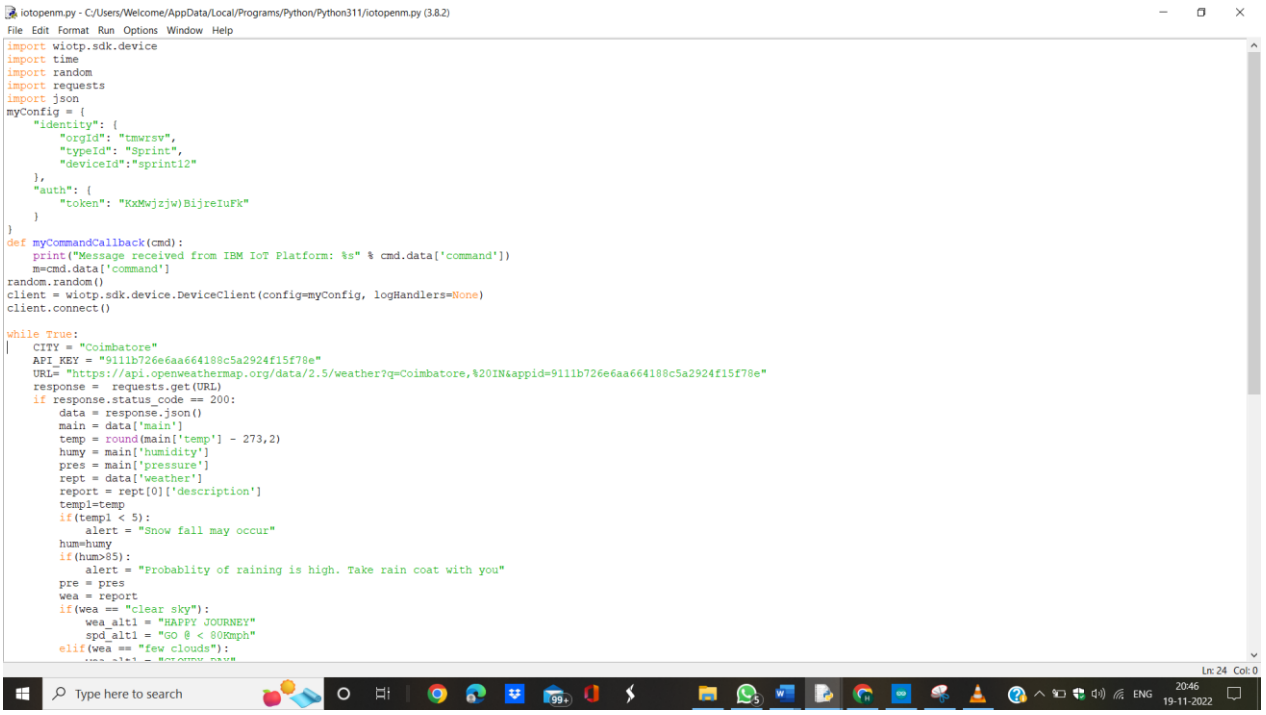
PYTHON SCRIPT:

```
import wiotp.sdk.device
import time
import random
import requests
import json
myConfig = {
   "identity": {
      "orgId": "tmwrsv",
      "typeId": "Sprint",
      "deviceId":"sprint12"
   },
   "auth": {
      "token": "KxMwjzjw)BijreIuFk"
   }
}
def myCommandCallback(cmd):
   print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
   m=cmd.data['command']
random.random()
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
   CITY = "Coimbatore"
   API_KEY = "9111b726e6aa664188c5a2924f15f78e"
   URL=
"https://api.openweathermap.org/data/2.5/weather?q=Coimbatore,%20IN&appid=9111b72
6e6aa664188c5a2924f15f78e"
   response =  requests.get(URL)
   if response.status_code == 200:
      data = response.json()
      main = data['main']
      temp = round(main['temp'] - 273,2)
      humy = main['humidity']
      pres = main['pressure']
      rept = data['weather']
      report = rept[0]['description']
      temp1=temp
```

```
        if(temp1 < 5):
            alert = "Snow fall may occur"
        hum=humy
        if(hum>85):
            alert = "Probablity of raining is high. Take rain coat with you"
        pre = pres
        wea = report
        if(wea == "clear sky"):
            wea_alt1 = "HAPPY JOURNEY"
            spd_alt1 = "GO @ < 80Kmph"
        elif(wea == "few clouds"):
            wea_alt1 = "CLOUDY DAY"
            spd_alt1 = "GO @ < 60Kmph"
        elif (wea == "overcast clouds"):
            wea_alt1 = "RAIN MAY COME"
            spd_alt1 = "GO @ < 30Kmph"
        elif(wea == "shower rain"):
            wea_alt1 = "SLIPPERY ROAD"
            spd_alt1 = "GO @ < 20Kmph"
        elif(wea == "rain" or "moderate rain"):
            wea_alt1 = "SLIPPERY ROAD"
            spd_alt1 = "GO @ < 20Kmph"
        elif(wea == "thunderstorm"):
            wea_alt1 = "HEAVY RAIN"
            spd_alt1 = "GO @ < 10Kmph"
        elif (wea == "snow"):
            wea_alt1 = "SNOW ON ROAD"
            spd_alt1 = "GO @ < 10Kmph"
        elif(wea == "mist"):
            wea_alt1 = "TURN ON FOG LAMP"
            spd_alt1 = "GO @ < 20Kmph"
        else:
            wea_alt1 = "HAPPY JOURNEY"
            spd_alt1 = "GO @ < 80Kmph"
        xyz = time.ctime()
        ctime = int(xyz[11:13])
        if (ctime > 8 and ctime < 10) or (ctime > 15 and ctime < 18):
            me = 'SCHOOL TIMING GO SLOW SPEED LIMIT: 15Kmph'
            spd_alt1 = "GO @ < 15Kmph!!!"
        else:
            me = xyz[11:19]
        myData={'location':CITY,'temperature':temp, 'humidity':hum, 'pressure':pre,
'weather_report':wea,'wea_alt':wea_alt1,'spd_alt':spd_alt1,'schl_tmg':me}
        client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)
        print("Published data Successfully: %s", myData)
        client.commandCallback = myCommandCallback
        time.sleep(1)
client.disconnect()
```

PYTHON IDE:



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        "typeId": "Sprint",
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    }
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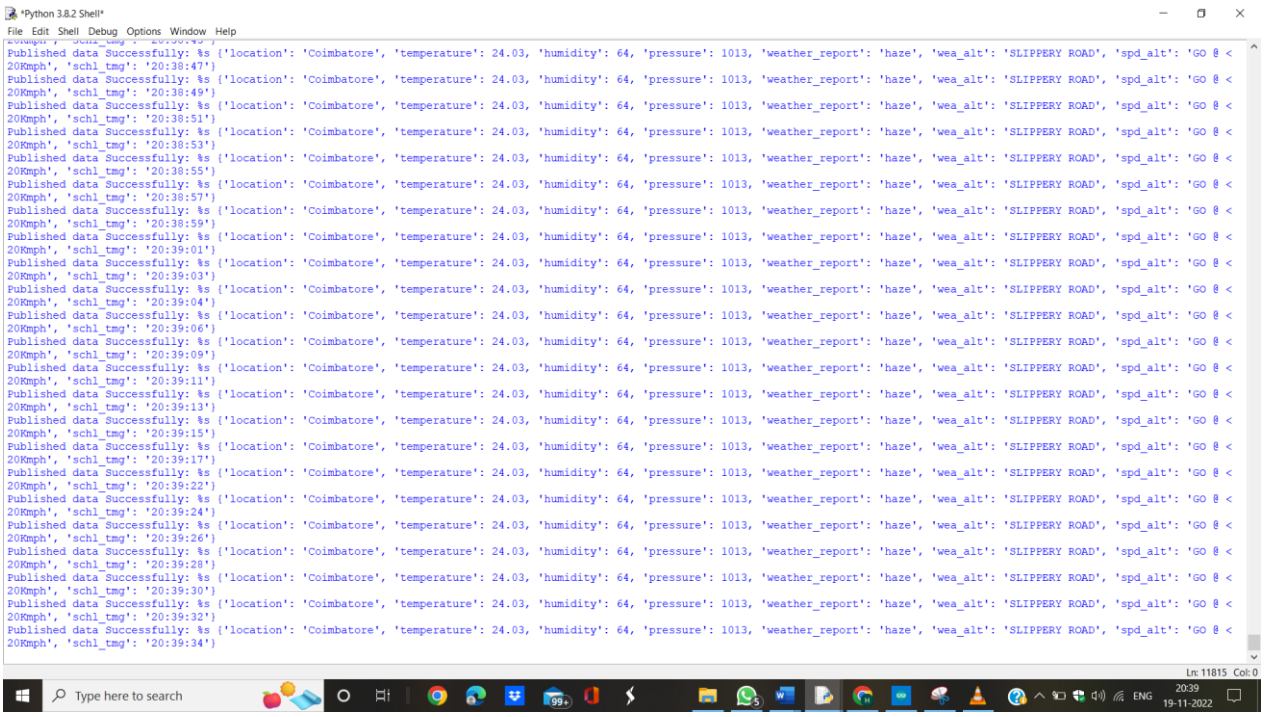
```

PYTHON IDE OUTPUT:



```
Published data Successfully: %s {'location': 'Coimbatore', 'temperature': 24.03, 'humidity': 64, 'pressure': 1013, 'weather_report': 'haze', 'wea_alt': 'SLIPPERY ROAD', 'spd_alt': 'GO @ <
20Kmph', 'schl_tmg': '20:38:47'}
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20Kmph', 'schl_tmg': '20:39:32'}
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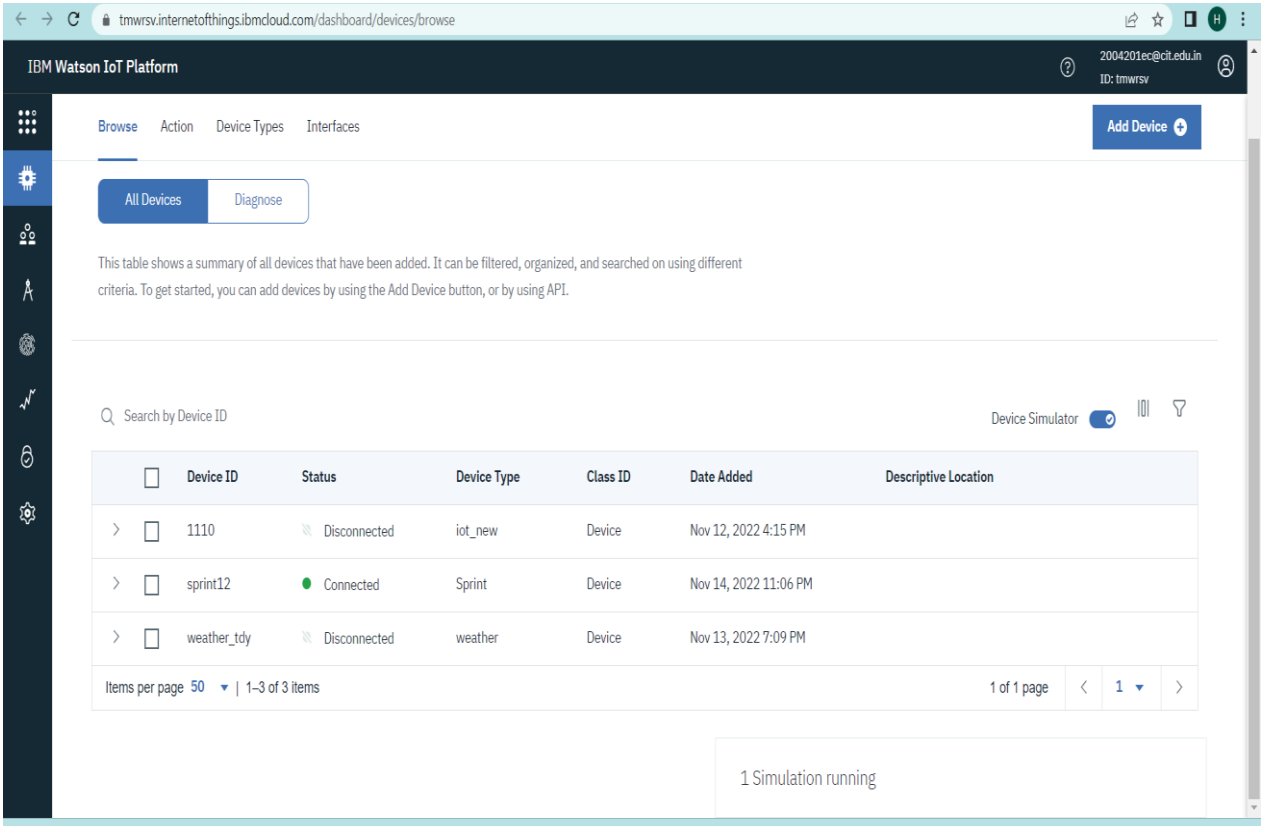
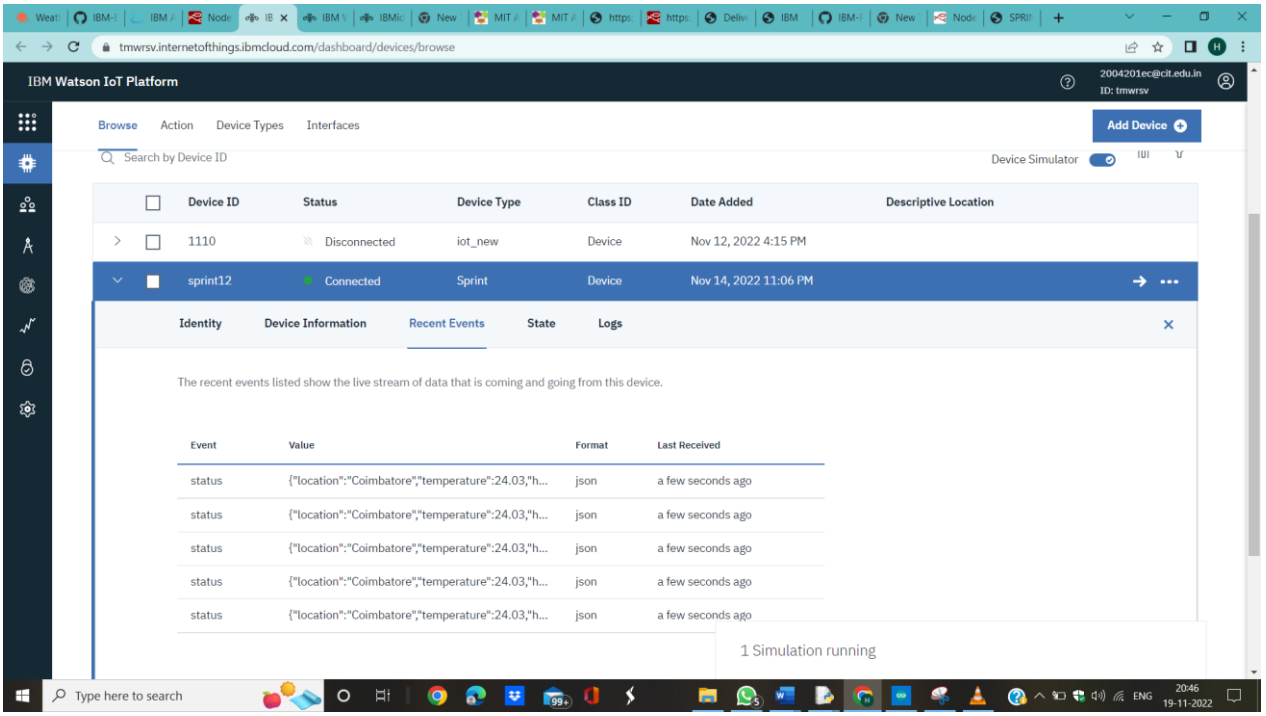
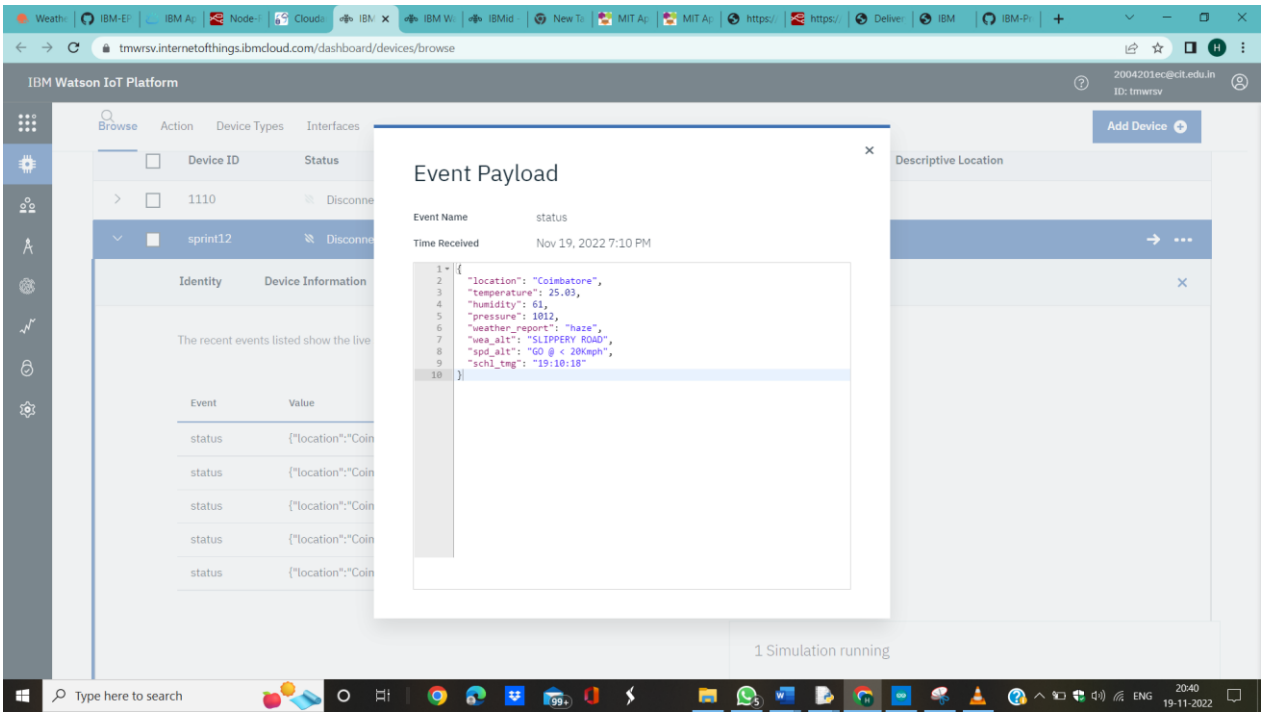
20Kmph', 'schl_tmg': '20:39:34'}
```

IBM WATSON IOT PLATFORM OUTPUT:






tmwrsv.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
2004201ec@cit.edu.in
ID: tmwrsv
Browse
Action
Device Types
Interfaces
Add Device
Device ID
Status
Descriptive Location
1110
sprint12
Identity
Device Information
The recent events listed show the live
Event
Value
status
Event Payload
Event Name
status
Time Received
Nov 19, 2022 7:10 PM
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"pressure": 1012,
"weather_report": "haze",
"wea_alt": "SLIPPERY ROAD",
"spd_alt": "GO @ < 20Kmph",
"schl_tmg": "19:10:18"
}
1 Simulation running
Type here to search
ENG
20:40
19-11-2022