Sprint 2

Date	5 November 2022
Team ID	PNT2022TMID00928
Project Name	Smart waste management system for metropolitan cities
Story Points	15

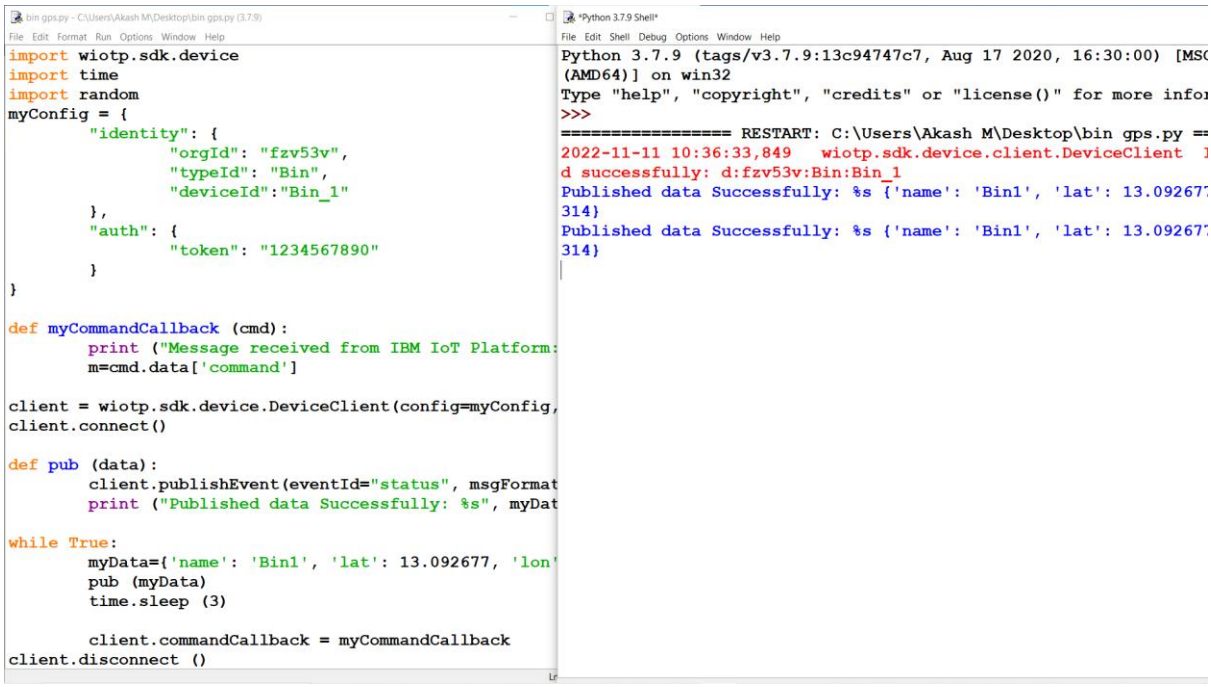
Develop the python code to find the GPS location using Latitude and Longitude (random values) and send it to Node red using IBM Watson platform and view location of bins on map

PYTHON CODE :

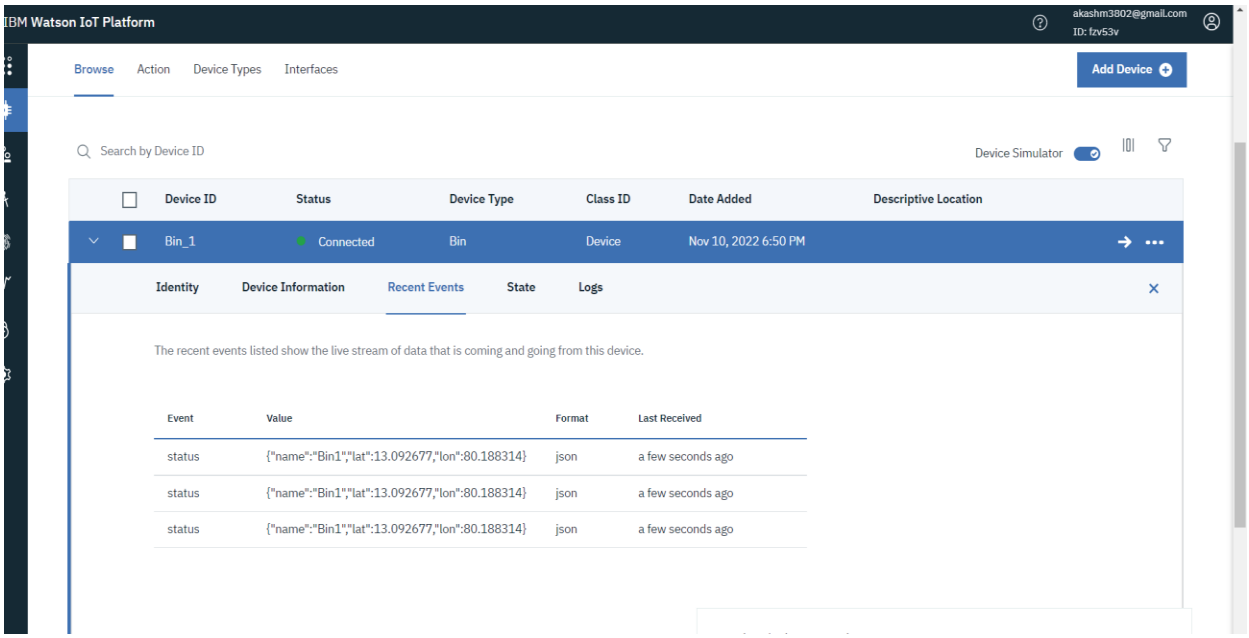
```
import wiotp.sdk.device
import time
import random
myConfig = {
        "identity": {
                "orgId": "fzv53v",
                "typeId": "Bin",
                "deviceId":"Bin_1"
        },
        "auth": {
                "token": "1234567890"
        }
}
def myCommandCallback (cmd):
        print ("Message received from IBM IoT Platform: %s" % cmd.data['command'])
        m=cmd.data['command']
```

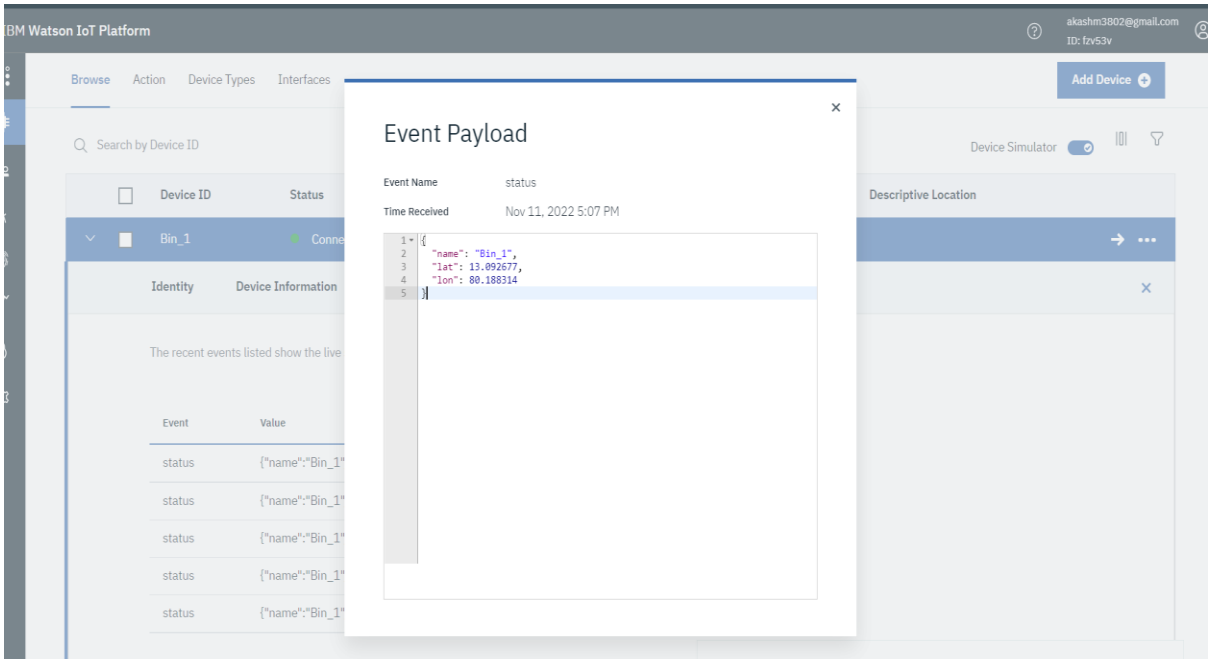
```
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)

client.connect()

def pub (data):

        client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)

        print ("Published data Successfully: %s", myData)

while True:

        myData={'name': 'Bin1', 'lat': 13.092677, 'lon': 80.188314}

        pub (myData)

        time.sleep (3)


        client.commandCallback = myCommandCallback

client.disconnect ()
```

Output in python IDLE :

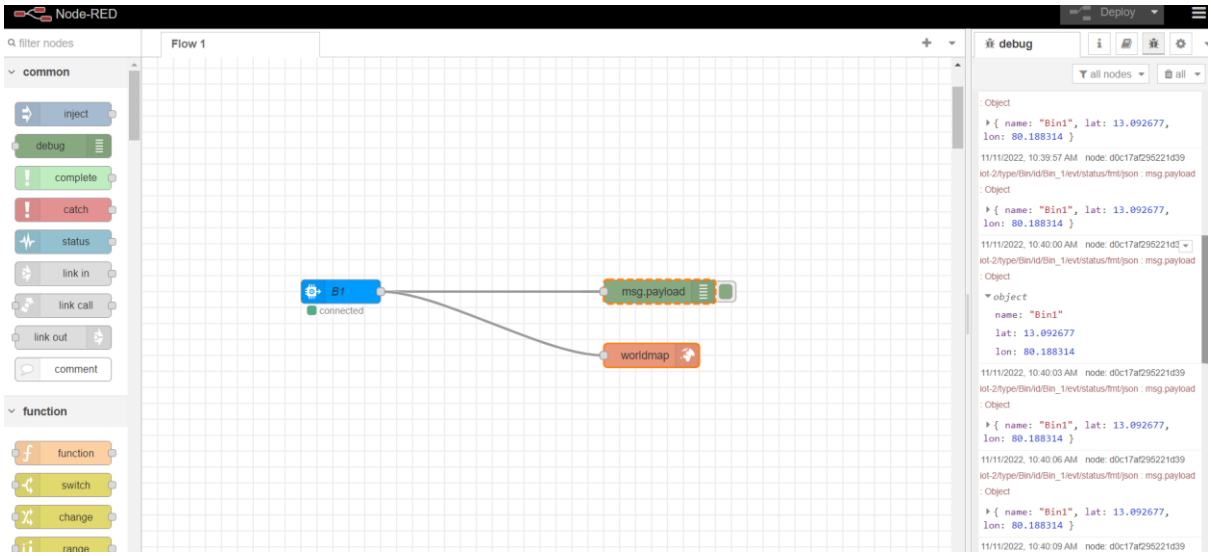


IBM Watson IOT platform :





Node Red Platform :



Location of Trash Bins Shown in World Map :