## PROJECT DEVELOPMENT PHASE

## **SPRINT-2**

TEAM ID	PNT2022TMID04740
PROJECT	Smart waste management system for metropolitan cities

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 the location of bins on map

## **PYTHON CODE:**

```
import wiotp.sdk.device
import time
import random
myConfig = {
  "identity":{
    "orgId":"j5bxb7",
    "typeId":"IOT123edevicetype",
    "deviceId":"IOTece4"
  },
  "auth": {
    "token":"e2)-17xkqIFMvm3@II"
  }
}
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="binstatus",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:**

```
诸 sp-2.py - C:/Users/ELCOT/AppData/Local/Programs/Python/Python37/sp-2.py (3.7.0)
File Edit Format Run Options Window Help
                                                                                                   File Edit Shell Debug Options Window Help
                                                                                                    import wiotp.sdk.device
import random
myConfig = {
        "identity":{
               "orgId":"15bxb7".
              "typeId":"IOT123edevicetype",
               "deviceId":"IOTece4"
        "auth": {
               "token":"e2)-17xkqIFMvm3@1I"
def myCommandCallback(cmd):
            print("Message received from IBM IoT Platform:\ss"\cmd.data['command'])
             m=cmd.data['command']
client=wiotp.sdk.device.DeviceClient(config=myConfig,logHandlers=None)
client.connect()
def pub(data):
        client.publishEvent(eventId="birstatus",msgFormat="json",data="myData",qos=0,onPublish=None)
       print("Published data Successfully:%s",myData)
       myData={'name':'Binl','lat':13.092677,'lon':80.188314}
       pub (myData)
        time.sleep(3)
        client.commandCallback=myCommandCallback
client.disconnect()
```