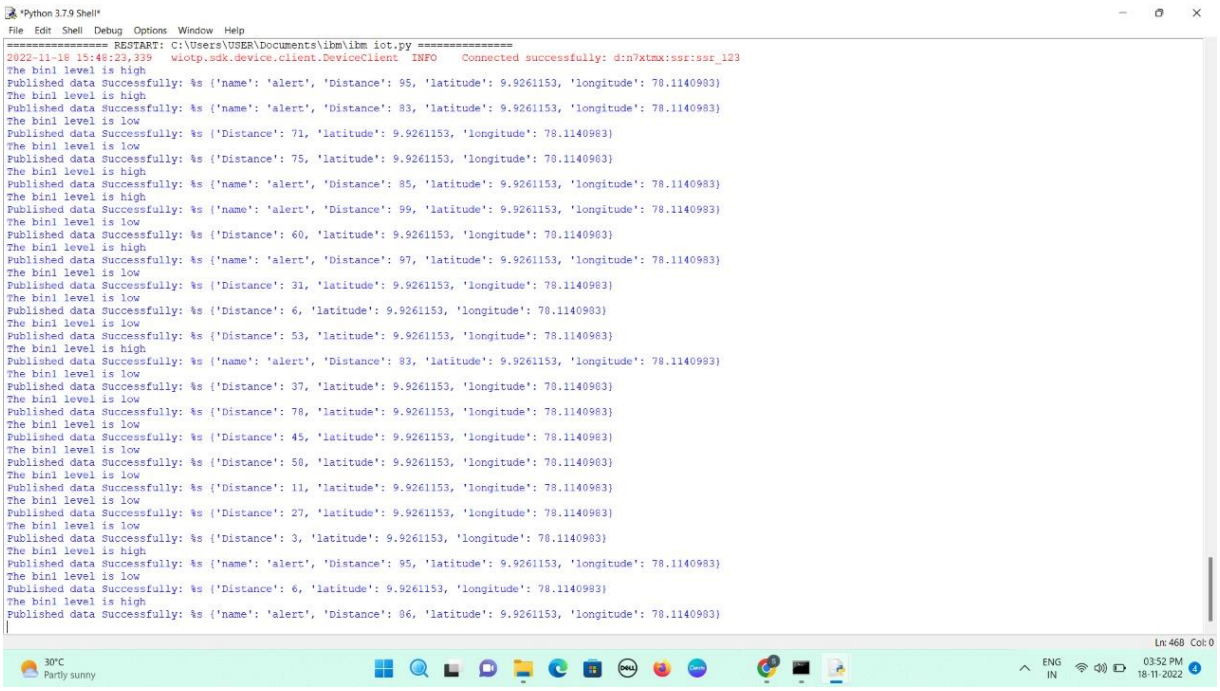
SPRINT III

Team ID	PNT2022TMID40462
Project Name	Smart Waste Management System for metropolitan cities

WORK DONE IN SPRINT 1:

- Python code is developed and then tested whether the code is generating random sensor data or not

SCREENSHOT:



CODE:

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
from geopy.geocoders import Nominatim
import wiotp.sdk.device
import time
import random
myConfig = {
   "identity": {
      "orgId": "n7xtmx",
      "typeId": "ssr",
      "deviceId":"ssr_123"
   },
```

```
    "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:
    dist1=random.randint(0,100)


    loc = Nominatim(user_agent="GetLoc")
    getLoc1 = loc.geocode("madurai")

    lat=getLoc1.latitude
    log=getLoc1.longitude

    f="alert"

    if dist1>=80:
        a=print('The bin1 level is high')
        type(a)
        myData={'name':f,'Distance':dist1,'latitude':lat,'longitude':log}
    else:
        a=print('The bin1 level is low')
        type(a)
        myData={'Distance':dist1,'latitude':lat,'longitude':log}

    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)

    client.commandCallback = myCommandCallback
    time.sleep(10)
client.disconnect()
```