Develop The Python Script

Team ID	PNT2022TMID11760
Project Name	Smart Waste Management System For Metropolitan Cities

TASK:

Develop a python script to publish the random sensor data to the IBM IoT platform.
Develop a python code for publishing the location (latitude and longitude) data along with bin values to the IBM IoT Platform.

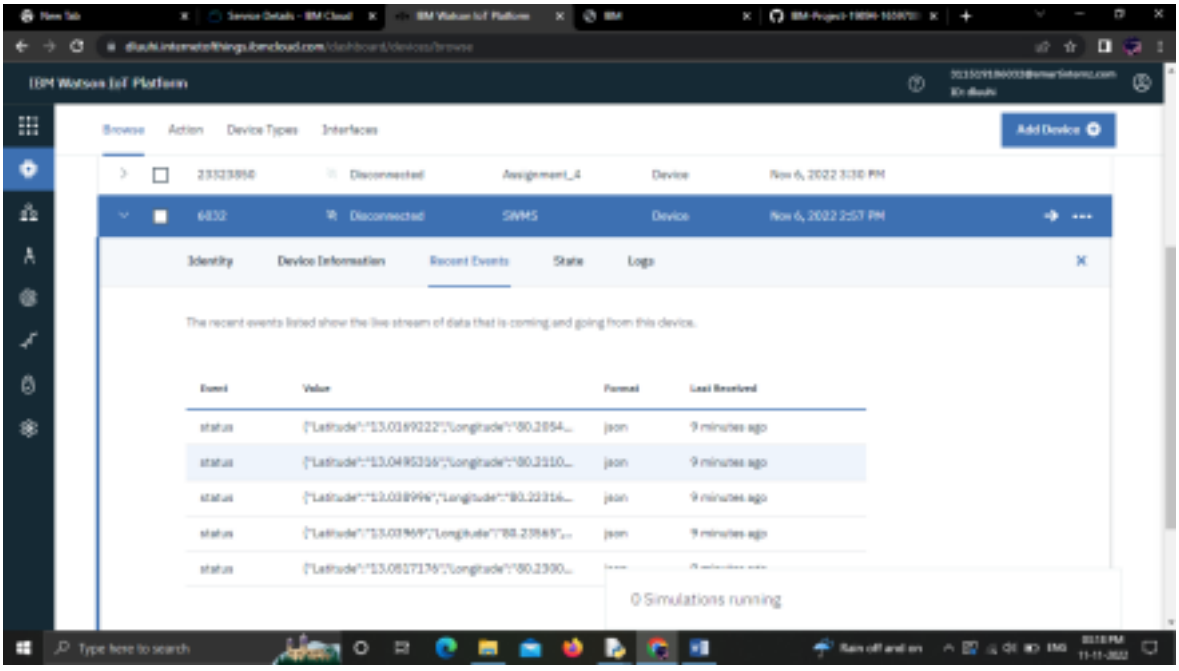
PYTHON CODE:

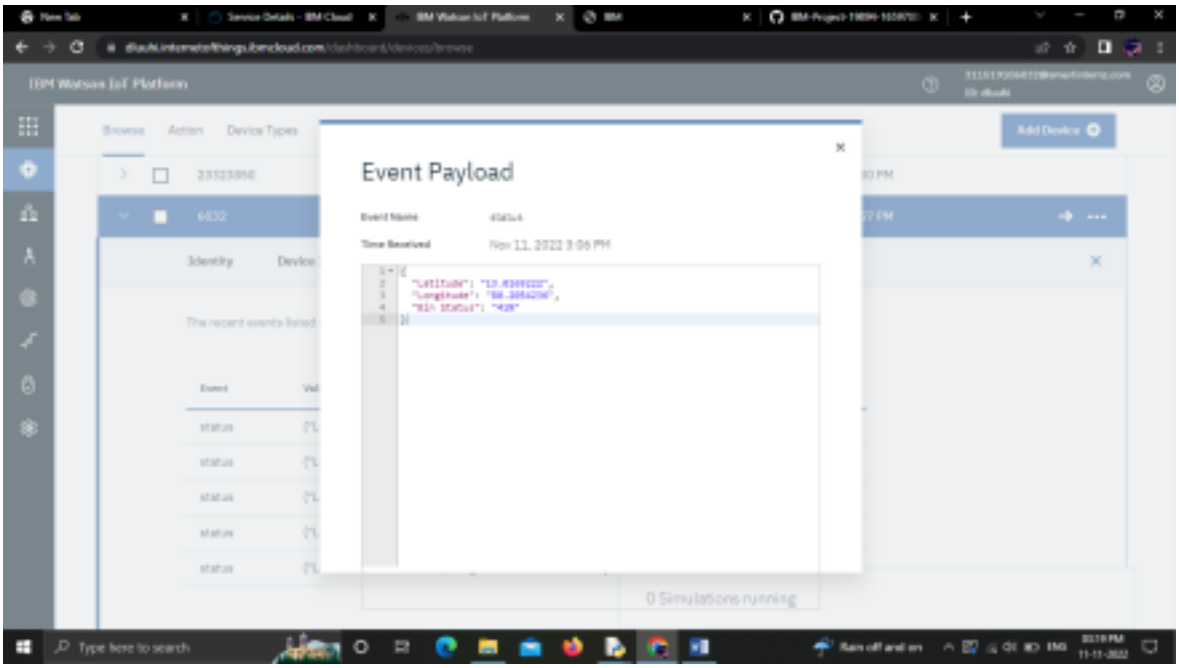
```
import wiotp.sdk.device
import time
import random
import requests
import urllib.parse
address= ['Kodambakkam','T.nagar','West mambalam','vadapalani','ekkattuthangal']
myConfig = {
    "identity": {
        "orgId": "dluuhi",
        "typeId": "SWMS",
        "deviceId":"6032"
    },
    "auth": {
        "token": "311519106032"
    }
}
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()

#Location=input("enter location: ")
#while(Location == address0):
for x in address:
  url = 'https://nominatim.openstreetmap.org/search/' + urllib.parse.quote(x) +'?format=json'
  response = requests.get(url).json()
  a = response[1]["lat"]
  b = response[1]["lon"]
  bin_stat = random.randint(0,100)
  In_percent = str(bin_stat)+ "%"
  myData={'Latitude':a, 'Longitude':b,"Bin Status":In_percent}
  client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
  print("Published data Successfully: ", myData)
  client.commandCallback = myCommandCallback
  time.sleep(2)
client.disconnect()
```

OUTPUT:

IBM WATSON CLOUD PLATFORM:

:




IBM Watson IoT Platform
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Action
Device Types
Add Device
Event Payload
Event Name
Time Received
Identity
Device
0 Simulations running
Type here to search