## Publish Data to IBM cloud

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| Team ID | PNT2022TMID31030 |
| Project Name | Smart waste management system for metropolitan cities |

## Steps:

**Step 1:** Open python idle.

**Step 2:** Type the program.

**Step 3:** Then click on the file and save the document.

**Step 4:** Then click on run and run the module.

**Step 5:** Output will be appeared in the idle window.

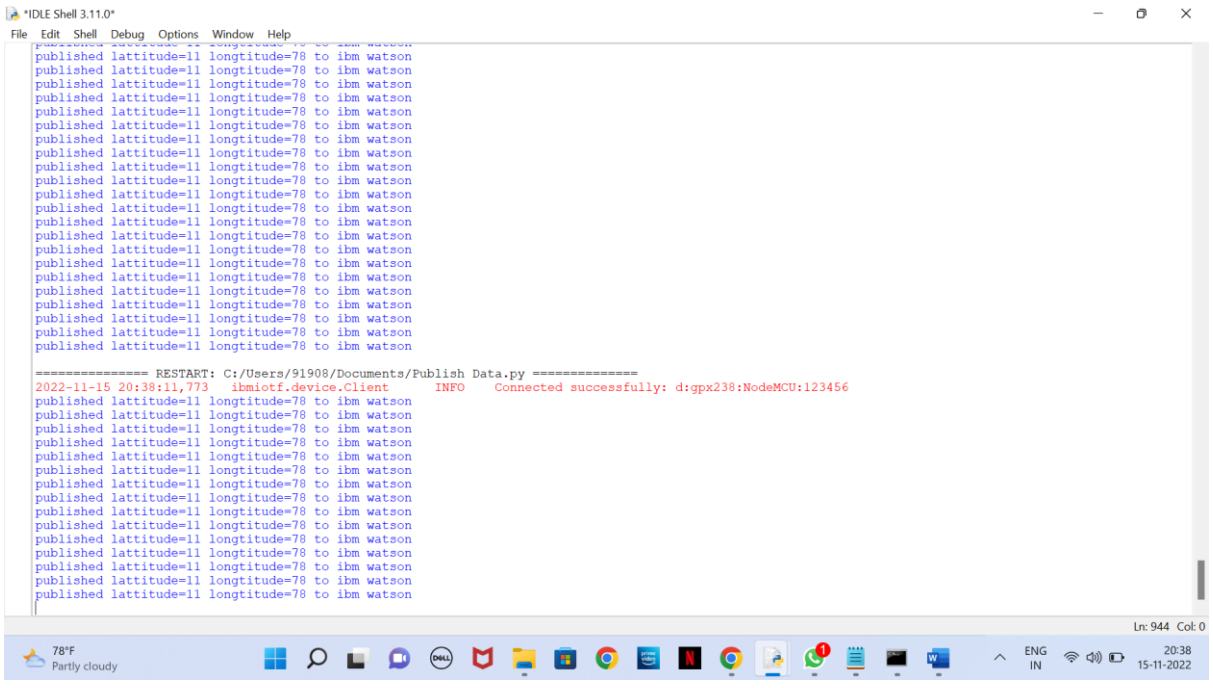
### Python code:

```
import time
import sys
import ibmiotf.device
import random

organization="gpx238"
deviceType="NodeMCU"
deviceId="123456"
authMethod="token"
authToken="12345678"

try:
    deviceOptions={"org": organization,"type": deviceType,"id": deviceId,"auth-method":
authMethod,"auth-token": authToken}
    deviceCli=ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("caught exception connecting device:%s" % str(e))
    sys.exit()
```

```
deviceCli.connect()
while True:
        #in data
        lattitude=11.7345;
        longtitude=78.2020;

        #out data
        #lattitude=12.7345;
        #longtitude=79.2020;

        data={'lattitude':lattitude,'longtitude':longtitude}
        def myOnPublishCallback():
          print("published lattitude=%d" %lattitude,"longtitude=%d" %longtitude,"to ibm
watson")



success=deviceCli.publishEvent("IotSensor","json",data,qos=0,on_publish=myOnPublishCal
lback)
        if not success:
            print("Not connected to IoTF")
        time.sleep(3)
deviceCli.disconnect()
```

## Screenshots:


**Python code**




**Output screen** (Data published)