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"import time
```

```
import sys
```

```
import ibmiotf.application
```

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import ibmiotf.device
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```
import random
```

```
import requests
```

```
import json
```

```
#Provide your IBM Watson Device Credentials Organization = "0z828r"
```

```
deviceType = "iotdevice"    #Credentials of Watson IoT sensor simulator
```

```
deviceId = "1001" authMethod = "token" authToken = "prathyusha"
```

```
# Initialize the device client.
```

```
L=0
```

```
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()
```

```
# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting"  
10 times deviceCli.connect()
```

```
while True:
```

```

overpass_url = http://overpass-api.de/api/interpreter
overpass_query = """
[out:json];area[name="India"];(node[place="village"])(area);out;
"""

```

```

Response = requests.get(
    Overpass_url,
    Params={'data': overpass_query}
)

```

```

Coords = []
if response.status_code == 200:
    Data = response.json()
    Places = data.get('elements', [])
    For place in places:
        Coords.append((place['lat'], place['lon']))
    Print ("Got %s village coordinates!" % len(coords))
    Print (coords[0])
else:
    Print("Error")

```

```

I = random.randint(1,100)
L = coords[i]
#Send random gprs data to node-red to IBM Watson
Data = {"d":{"Latitude" : L[0], 'Longitude' : L[1]}}
#print data
def myOnPublishCallback():
    Print("Published gprs location = ", L, "to IBM Watson")

```

```
Success = deviceCli.publishEvent("Data", "json", data, qos=0, on_publish=myOnPublishCallback)
time.sleep(12)

If not success:
    Print("Not connected to IoT")
    time.sleep(1)

deviceCli.disconnect()
```