## Develop a python script

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## Code for data transmitting to WIoT device

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = {
  "identity": {
    "orgId": "ezj2wy",
    "typeId": "NodeMCU",
    "deviceId":"12345"
  },
  "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:
  temp=random.randint(-20,125)
  hum=random.randint(0,100)
  speed=random.randint(0,80)
  n=random.randint(1,3)
  r=random.uniform(0.0,10.0)
  if(n==1):
    flow="Normal"
    rn="Simple"
  elif(n==2):
    flow="Medium"
    rn="Moderate"
  else:
    flow="High"
    rn="Complex"
  myData={'temperature':temp, 'humidity':hum, 'speedlimit':speed,'flow':flow,'roadnetwork':rn,'rain':r}
  client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
  print("Published data Successfully:", myData)
  client.command Callback = my Command Callback \\
  time.sleep(2)
client.disconnect()
```

## OutPut:

```
= RESTART: C:\Users\SURIYAKUMAR\AppData\Local\Programs\Python\Python39\data_bublish.py
['142.250.193.142', '2404:6800:4007:805::200e']
2022-11-11 00:46:10,650 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:ezj2wy:NodeMCU:12345
Published data Successfully: {'temperature': 24, 'humidity': 94, 'speedlimit': 59, 'flow': 'Normal', 'roadnetwork': 'Simple', 'rain': 3.446523346704783}
Published data Successfully: {'temperature': 8, 'humidity': 1, 'speedlimit': 60, 'flow': 'Medium', 'roadnetwork': 'Moderate', 'rain': 5.142854934934532}
Published data Successfully: {'temperature': -11, 'humidity': 6, 'speedlimit': 55, 'flow': 'High', 'roadnetwork': 'Complex', 'rain': 1.7808891763454493}
Published data Successfully: {'temperature': -14, 'humidity': 36, 'speedlimit': 52, 'flow': 'Normal', 'roadnetwork': 'Simple', 'rain': 7.082334219073925}
Published data Successfully: {'temperature': 56, 'humidity': 55, 'speedlimit': 33, 'flow': 'High', 'roadnetwork': 'Complex', 'rain': 4.793569684944451}
Published data Successfully: {'temperature': 44, 'humidity': 85, 'speedlimit': 16, 'flow': 'Medium', 'roadnetwork': 'Moderate', 'rain': 0.9367743669539286}
```