

PYTHON SCRIPT:

```
#IBM Watson IOT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import time

import random

myConfig = {
    "identity": {
        "orgId": "afblzo",
        "typeId": "raspberrypi",
        "deviceId": "1234"
    },
    "auth": {
        "token": "123456789"
    }
}

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:
```

```
    temperature=random.randint(-20,125)
```

```
    vehiclescount=random.randint(0,100)
```

```
    workingarea_distance=random.randint(0,60)
```

```
    accidentalarea_distance=random.randint(1,25)
```

```
    p="Your Preferred Speed"
```

```
    q="Speed Limit is 30 km\hr"
```

```
    r="Take another route"
```

```
    s="As Your Wish"
```

```
    t="Go Slow"
```

```
    u="Moderate speed"
```

```
    v="it's accidental area, Be Carefull"
```

w="Beyond the accidental area! Have a safe journey"

a={'Condition_for_Speed':p}

b={'Condition_for_Speed':q}

c={'Condition_for_Direction':r}

d={'Condition_for_Direction':s}

e={'Cond_for_Speed':t}

f={'Cond_for_Speed':u}

g={'Condition_for_Drive':v}

h={'Condition_for_Drive':w}

myData1={'Temperature':temperature}

myData2={'Vehiclescount':vehiclescount}

myData3={'WorkingArea_Distance':workingarea_distance}

myData4={'AccidentalArea_Distance':accidentalarea_distance}

```
client.publishEvent(eventId="status",msgFormat="json",data=myData1,qos=0,onPublish=None)
```

```
    print("Published:%s",myData1)
```

```
    if temperature>=21:
```

```
        client.publishEvent(eventId="status",  
msgFormat="json",data=a,qos=0,onPublish=None)
```

```
        print(a)
```

```
        print("\n")
```

```
    else :
```

```
        client.publishEvent(eventId="status",  
msgFormat="json",data=b,qos=0,onPublish=None)
```

```
        print(b)
```

```
        print("\n")
```

```
client.publishEvent(eventId="status",msgFormat="json",data=myData2,qos=0,onPublish=None)
```

```
    print("Published:%s",myData2)
```

```
    if vehiclescount>=53:
```

```
client.publishEvent(eventId="status",msgFormat="json",data=c,qos=0,onPublish=None)
```

```
    print(c)
```

```
    print("\n")
```

```
else:
```

```
client.publishEvent(eventId="status",msgFormat="json",data=d,qos=0,onPublish=None)
```

```
    print(d)
```

```
    print("\n")
```

```
client.publishEvent(eventId="status",msgFormat="json",data=myData3,qos=0,onPublish=None)
```

```
    print("Published:%s",myData3)
```

```
    if workingarea_distance>=4:
```

```
        client.publishEvent(eventId="status",msgFormat="json",data=f,qos=0,onPublish=None)
```

```
        print(f)
```

```
        print("\n")
```

```
    else :
```

```
    client.publishEvent(eventId="status",
msgFormat="json",data=e,qos=0,onPublish=None)

    print(e)

    print("\n")
```

```
client.publishEvent(eventId="status",msgFormat="json
",data=myData4,qos=0,onPublish=None)

    print("Published:%s",myData4)

    if accidentalarea_distance>=3:

        client.publishEvent(eventId="status",
msgFormat="json",data=h,qos=0,onPublish=None)

        print(h)

        print("\n")

    else :

        client.publishEvent(eventId="status",
msgFormat="json",data=g,qos=0,onPublish=None)

        print(g)

        print("\n")
```

client.commandCallback=myCommandCallback

time.sleep(10)

client.disconnect()

OUTPUT:

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\ksk11\AppData\Local\Programs\Python\Python37\projcode.py =
2022-11-16 22:01:11.113 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: diafb1zo:raspberrypi:1234Published:%s
{'Temperature': 3}
{'Condition_for_Speed': 'Speed Limit is 30 km\\hr'}

Published:%s {'Vehiclescount': 54}
{'Condition_for_Direction': 'Take another route'}

Published:%s {'WorkingArea_Distance': 60}
{'Cond_for_Speed': 'Moderate speed'}

Published:%s {'AccidentalArea_Distance': 3}
{'Condition_for_Drive': 'Beyond the accidental area! Have a safe journey'}

Published:%s {'Temperature': -3}
{'Condition_for_Speed': 'Speed Limit is 30 km\\hr'}

Published:%s {'Vehiclescount': 44}
{'Condition_for_Direction': 'As Your Wish'}

Published:%s {'WorkingArea_Distance': 25}
{'Cond_for_Speed': 'Moderate speed'}

Published:%s {'AccidentalArea_Distance': 12}
{'Condition_for_Drive': 'Beyond the accidental area! Have a safe journey'}

Published:%s {'Temperature': -7}
{'Condition_for_Speed': 'Speed Limit is 30 km\\hr'}

Published:%s {'Vehiclescount': 78}
{'Condition_for_Direction': 'Take another route'}

Published:%s {'WorkingArea_Distance': 57}
{'Cond for Speed': 'Moderate speed'}

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```