

## Develop the python script

Team ID	PNT2022TMID32979
Project Name	Signs with smart connectivity for better road safety

### Develop a python script :

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

#Provide your IBM Watson Device Credentials
organization = "q9m3l6"
deviceType = "mdhar"
deviceId = "8602"
authMethod = "token"
authToken = "12345678"

# Initialize GPIO

def myCommandCallback(cmd):
```

```
print("Command received: %s" % cmd.data['command'])
```

```
status=cmd.data['command']
```

```
if status=="switchon":
```

```
    print ("Switch is on")
```

```
else :
```

```
    print ("Switch is off")
```

```
#print(cmd)
```

```
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:
```

```
    #Get Sensor Data from DHT11
```

```
temperature=28.990000000000001
```

```
visibility=50
```

```
data = { 'temperature' : temperature, 'visibility': visibility}
```

```
#print data
```

```
def myOnPublishCallback():
```

```
    print ("Published Temperature = %s C" % temperature, "visibility = %s %"
% visibility,"to IBM Watson")
```

```
    success = deviceCli.publishEvent("ibmiot", "json", data, qos=0,
on_publish=myOnPublishCallback)
```

```
    if not success:
```

```
        print("Not connected to IoT")
```

```
    time.sleep(1)
```

```
deviceCli.commandCallback = myCommandCallback
```

```
# Disconnect the device and application from the cloud
```

```
deviceCli.disconnect()
```