

# DEVELOP A PYTHON SCRIPT

## Python Script

<b>Team ID</b>	PNT2022TMID27948
<b>Project Name</b>	IoT-Based Safety Gadget for Child Safety Monitoring and Notification
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```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "9g56i9"
deviceType = "abcd"
deviceId = "12"
authMethod = "token"
authToken = "12345678"

# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print("led is on")
    elif status == "lightoff":
        print("led is off")
    else:
        print("please send proper command")

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
```

```

Temp=random.randint(90,110)
Humid=random.randint(60,100)
data={'Temp':Temp, 'Humid': Humid}
#print data
def myOnPublishCallback():
    print ("Published Temperature =%s C" %Temp, "Humidity=%s %" %Humid,"to
IBM Watson")

    success=deviceCli.publishEvent("IOTSensor","json",data, qos=0,
on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IOTF")
        time.sleep(10)

    deviceCli.commandCallback=myCommandCallback

#disconnect the device and application from the cloud
deviceCli.disconnect()

```

```

Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD6
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\S\Desktop\IBM\Python Script.py =====
2022-11-16 20:08:49,618    ibmiotf.device.Client      INFO      Connected successfu
lly: d:9g56i9:abcd:12
Published Temperature =105 C Humidity=76 % to IBM Watson
Published Temperature =108 C Humidity=100 % to IBM Watson
Published Temperature =98 C Humidity=88 % to IBM Watson
Published Temperature =98 C Humidity=83 % to IBM Watson

```