

# Develop A Python Script

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Project Name	PERSONAL ASSISTANCE FOR SENIORS WHO ARE RELIANT

## PYTHON SCRIPT:

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

```
organizationID='zjr8na'
deviceType='sathya'
deviceId='0502'
authMethod='token'
authToken='12345678'
```

```
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:
    deviceOption={"org":organizationID,"type":deviceType,"id":deviceId,"auth-
method":authMethod,"auth-token":authToken}
    deviceCli = ibmiotf.device.Client(deviceOption)
except Exception as e:
    print("Caught exception connecting device: %s" %str(e))
    sys.exit()

deviceCli.connect()
```

```

while True:
    temp=random.randint(90,100)
    Humid=random.randint(10,100)

    data ={'temp': temp,'Humid': Humid}
    def myOnPublishCallback():
        print("Published Distance=%s c" %temp,"Humidity=%s %" % Humid,"to IBM
Watson")

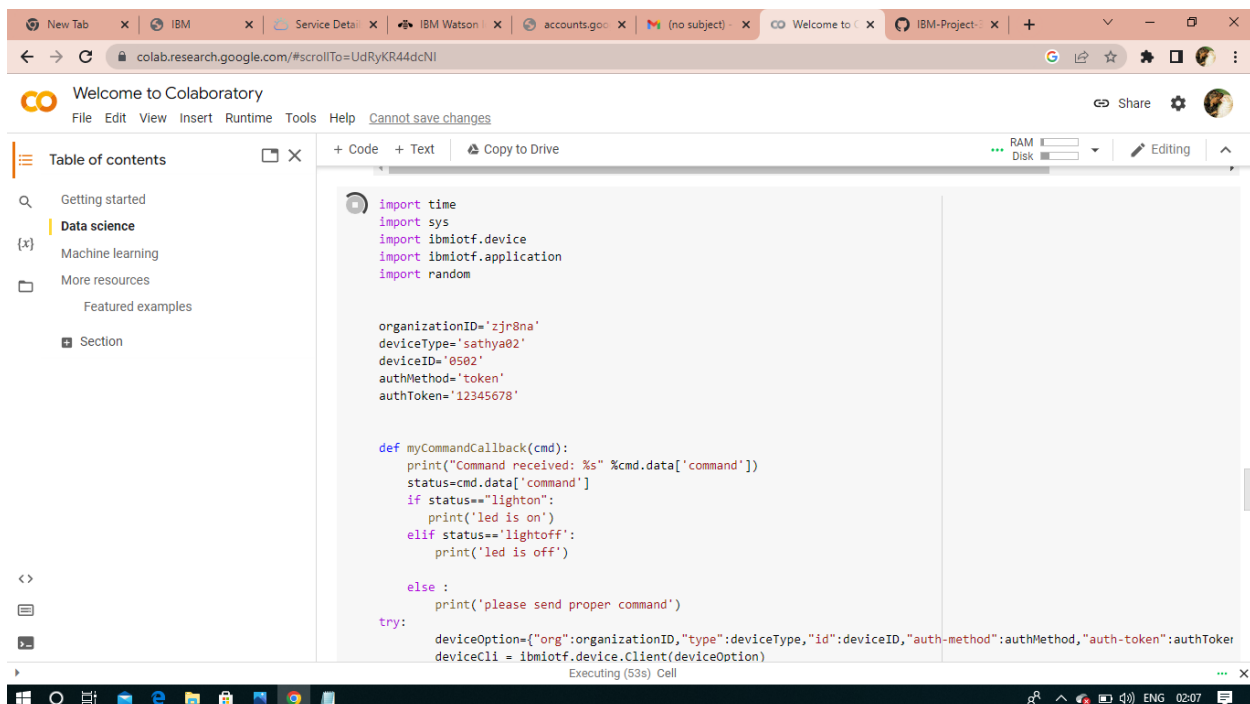
    success=deviceCli.publishEvent("IOTSensor","json",
data,qos=0,on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IOTF");
        time.sleep(10)

    deviceCli.commandCallback = myCommandCallback

deviceCli.disconnect()

```

## SCRIPT:



The screenshot shows a Google Colaboratory notebook with the following code in a cell:

```

import time
import sys
import ibmiotf.device
import ibmiotf.application
import random

organizationID='zjr8na'
deviceType='sathya02'
deviceID='0502'
authMethod='token'
authToken='12345678'

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')

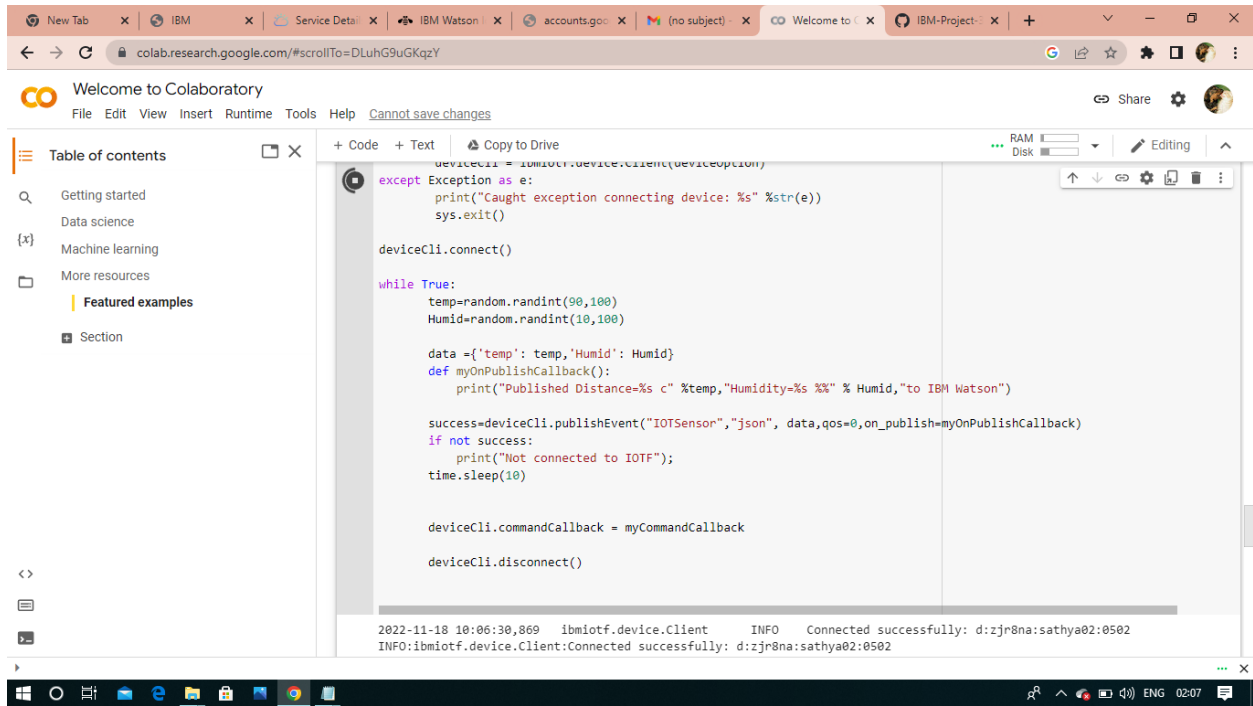
    else :
        print('please send proper command')

try:
    deviceOption={"org":organizationID,"type":deviceType,"id":deviceID,"auth-method":authMethod,"auth-token":authToken}
    deviceCli = ibmiotf.device.Client(deviceOption)

```

The notebook interface includes a sidebar with a table of contents, a top menu bar with options like File, Edit, View, Insert, Runtime, Tools, and Help, and a bottom status bar indicating the cell is executing on an S398 machine.

## OUTPUT:



The screenshot shows a Google Colaboratory notebook interface. The browser address bar displays the URL `colab.research.google.com/#scrollTo=DLuhG9uGKqzY`. The notebook's left sidebar contains a 'Table of contents' with links to 'Getting started', 'Data science', 'Machine learning', and 'More resources'. The main code editor displays the following Python code:

```
deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("Caught exception connecting device: %s" %str(e))
    sys.exit()

deviceCli.connect()

while True:
    temp=random.randint(90,100)
    Humid=random.randint(10,100)

    data ={'temp': temp,'Humid': Humid}
    def myOnPublishCallback():
        print("Published Distance=%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

deviceCli.disconnect()
```

The output console at the bottom of the notebook shows the following log messages:

```
2022-11-18 10:06:30,869 ibmiotf.device.Client INFO Connected successfully: d:zjr8na:sathya02:0502
INFO:ibmiotf.device.Client:Connected successfully: d:zjr8na:sathya02:0502
```