**SPRINT-3**

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| --- | --- |
| TEAM ID | PNT2022TMID20252 |
| Project Name | IoT Based smart crop Protection system for agriculture |
| Maximum mark | 20 marks |

**PYTHON CODE:**

import time

import sys

import ibmiotf.application

import ibmiotf.device

import random

#Provide your IBM Watson Device Credentials

organization ="8osflk"

deviceType = "cropprotection99"

deviceId = "cropprotection99"

authMethod="token"

authToken ="duiH-8z@4u@JXTmx20"

# InitializeGPIO

def myCommandCallback(cmd):

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

status =cmd.data['command']

if status=="lighton":

print("led on")

else:

print("led 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()

#Connectandsendadatapoint"hello"withvalue"world"intothecloudasaneventtye"greeting"10times

deviceCli.connect()

while True:

#GetSensorDatafromDHT11

temp=random.randint(0,100)

humid=random.randint(0,100)

data={'temperature':temp,'humidity':humid}

#printdata

def myOnPublishCallback():

print("Published Temperature=%s C" %temp,"Humidity=%s %%" % humid,"to IBMWatson")

success=deviceCli.publishEvent("IoTSensor","json",data,qos=0,on\_publish=myOnPublishCallback)

if not success:

print("NotconnectedtoIoTF")

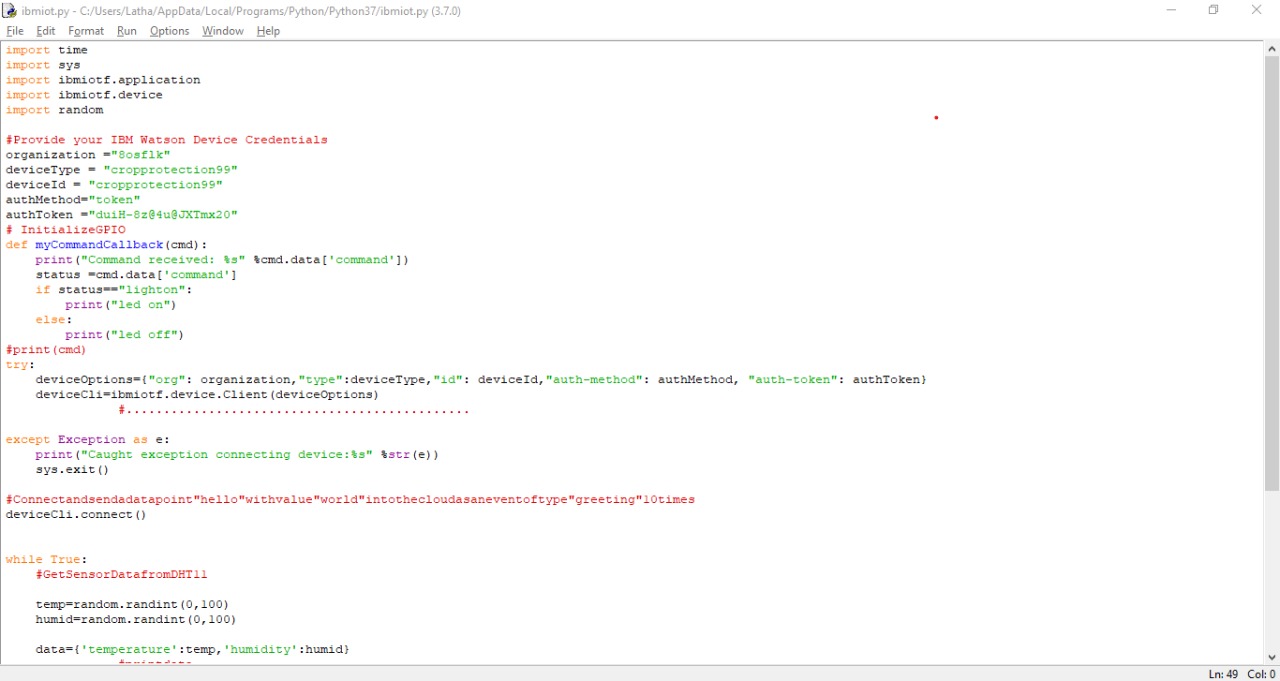
time.sleep(1)

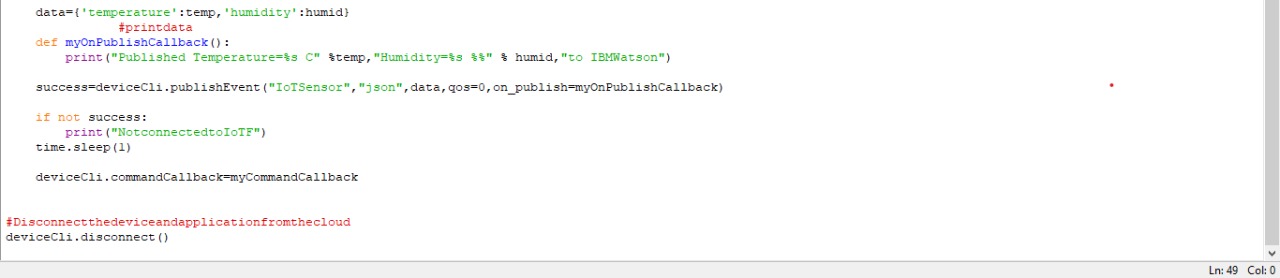
deviceCli.commandCallback=myCommandCallback

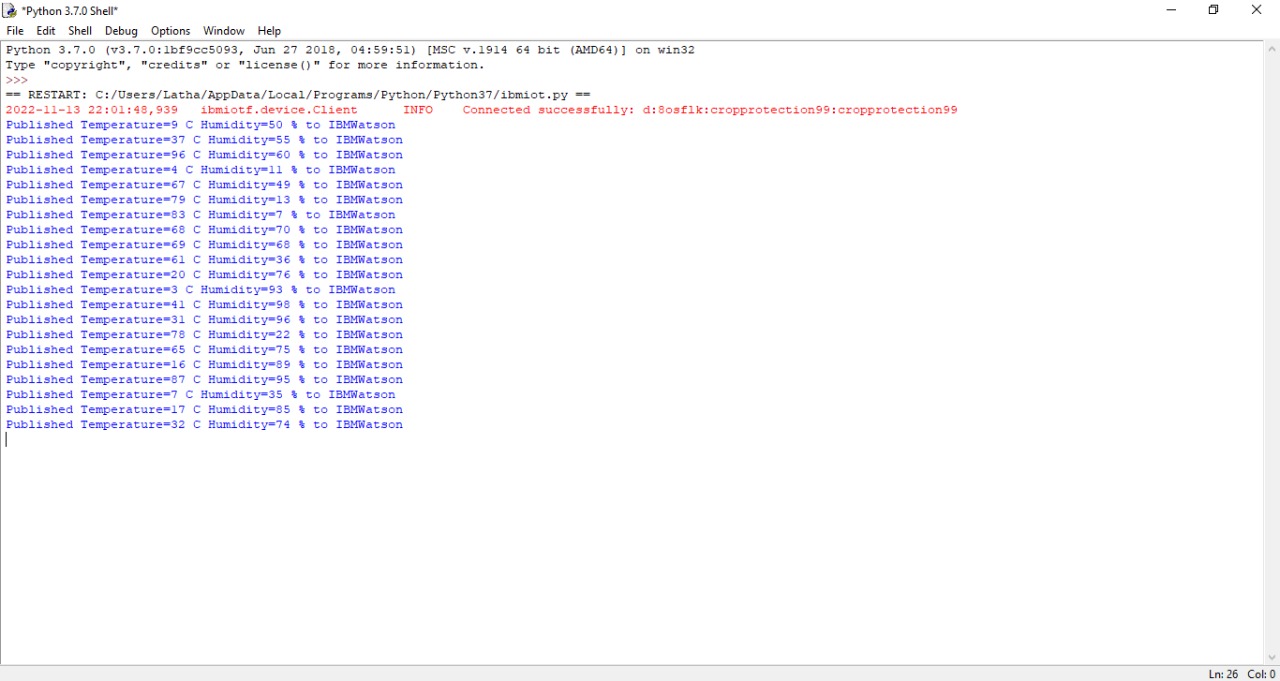
#Disconnectthedeviceandapplicationfromthecloud

deviceCli.disconnect()

**OUTPUT:**







**IBM WATSON PLATFORM**

