**DEVELOP A PHYTON SCRIPT**

import time

import sys

import ibmiotf.application

import ibmiotf.device

#Provide your IBM Watson Device Credentials

organization = "apeazs"

deviceType = "Gopika1205”

deviceId = "project01"

authMethod = "use-token-auth"

authToken = "a&LBOjTvkBHo9tv4YZ"

# Initialize GPIO

temp=60

hum=24

moisture=40%

pulse=70

oxygen= 30

lat = 17

lon = 18

def myCommandCallback(cmd):

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

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

data = {"d":{ 'temp' : temp, 'pulse': pulse ,'oxygen': oxygen,"lat":lat,"lon":lon}}

#print data

def myOnPublishCallback():

print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % pulse, "to IBM Watson")

print (“Publish Soil moisture =%sC%,Humidity=%s%% pulse to IBM watson

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

if not success:

print("Not connected to IoTF")

time.sleep(1)

deviceCli.commandCallback = myCommandCallback

# Disconnect the device and application from the cloud

deviceCli.disconnect()