

## SPRINT 2

**TEAM ID: PNT2022TMID41422**

### PYTHON CODE TO IBM

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

#Provide your IBM Watson Device Credentials
organization = "wu5b55"
deviceType = "crop1"
deviceId = "1234"
authMethod = "token"
authToken = "1234567890"

# Initialize GPIO

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(0,100)
    Hum=random.randint(0,100)
    moisture=random.randint(0,100)

    data = { 'temperature' : temp, 'Humidity': Hum,
'Moisture':moisture }
```

```
#print data
def myOnPublishCallback():
    print ("Temperature = " + str(temp)+" C Humidity = " +
str(hum)+ " moisture = " + str(moisture) + "to IBM Watson")

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

    deviceCli.commandCallback = myCommandCallback

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