

TEAM ID	PNT2022TMID24852
PROJECT TITLE	IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE
DATE	18/11/2022

CODE:

```

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

#Provide your IBM Watson Device Credentials
organization = "f41515"
deviceType = "abcd"
deviceId = "6880"
authMethod = "token"
authToken = "12345678"

# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="motoron":
        print ("motor is on")
    else :
        print ("motor is 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()

    # 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(90,100)

```

```
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 IoT")
time.sleep(10) deviceCli.commandCallback =
myCommandCallback
# Disconnect the device and application from the cloud
deviceCli.disconnect()
```