TEAM ID	PNT2022TMID4852
PROJECT TITLE	IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE
DATE	18/11/2022

CODE:

```
Import time
import sys
import 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
```

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