

## FINAL CODE

**TEAM ID :** PNT2022TMID40695

**PROJECT NAME :** IOT Based Smart crop protection for Agriculture

```
import time
import sys
import ibmiotf.application # to
```

```
install pip
install ibmiotf
import ibmiotf.device
```

```
#Provide your IBM Watson Device Credentials
```

```
organization = "hrodmj" #replace the ORG ID
```

```
deviceType =
```

```
"NODEMCU1"#replace the
```

```
Device type wi deviceId =
```

```
"12345"#replace Device ID
```

```
authMethod = "token"
```

```
authToken = "kp1234" #Replace
```

```
the authToken
```

```
def myCommandCallback(cmd): # function for Callback
```

```
print("Command received: %s" % cmd.data)    if
```

```
cmd.data['command']=='motoron':
```

```
print("Motor On IS RECEIVED")
```

```
elif cmd.data['command']=='motoroff':
```

```
print("Motor Off IS RECEIVED")
```

```
if cmd.command == "setInterval":
```

```

    if 'interval' not in cmd.data:

        print("Error - command is missing required information: 'interval'")

    else:

        interval = cmd.data['interval']

elif cmd.command == "print":            if

'message' not in cmd.data:

        print("Error - command is missing required information: 'message'")

    else:

        output=cmd.data['message']

print(output)

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:

    deviceCli.commandCallback = myCommandCallback #

Disconnect the device and application from the cloud

deviceCli.disconnect()

```