# PROJECT DEVELOPMENT PHASE

| Team ID | PNT2022TMID06235 |
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| Project Name | Project - IoT Based Smart Crop Protection System for Agriculture |

## SPRINT – 4:

## PROGRAM:

```
import json
import wiotp.sdk.device
import time
import random
import ibmiotf.application
import ibmiotf.device

myConfig = {
    "identity": {
        "orgId": "vwcvi9",
        "typeId": "ESP32",
        "deviceId":"12345"
    },
    "auth": {
        "token": "12345678"
    }
}
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("light is on")
    elif status == "lightoff":
        print ("light is off")
    elif status == "motoron":
        print ("motor is on")
    elif status == "motoroff":
        print ("motor is off")
    else :
        print ("please send proper command")

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
```

```python
    soil=random.randint(0,30)
    humid=random.randint(0,200)
    temp=random.randint(1,100)
    pir=random.randint(0,1)

myData={'SoilMoisture':soil,'Humidity':humid,'Temperature':temp,'PIRmotion
':pir}
    client.publishEvent(eventId="status", msgFormat="json", data=myData,
qos=0, onPublish=None)
    print("Published data Successfully: ", myData)
    time.sleep(20)

    client.commandCallback = myCommandCallback

client.disconnect()
```