

# SmartFarmer - IoT Enabled Smart Farming Application

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## FINAL CODE

```
#IBM Watson IOT Platform
```

```
#pip install wiotp-sdk
```

```
import wiotp.sdk.device
```

```
import time
```

```
import random
```

```
myConfig = {
```

```
    "identity": {
```

```
        "orgId": "trodnx",
```

```
        "typeId": "testmydevice",
```

```
        "deviceId":"12345"
```

```
    },
```

```
    "auth": {
```

```
        "token": "12345678"
```

```
    }
```

```
}
```

```
def myCommandCallback(cmd):  
    print("Message received from IBM IoT Platform: %s" %  
cmd.data['command'])  
    m=cmd.data['command']  
    if (m=="MOTOR ON"):  
        print ("Motor is switched on")  
    elif (m=="MOTOR OFF"):  
        print ("Motor is switched OFF")  
    print (" ")
```

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

```
while True:  
    soil=random.randint (0,100)  
    temp=random.randint (-20, 125)  
    hum=random.randint (0, 100)  
    myData={'soil moisture': soil, 'temperature':temp,  
'humidity':hum}
```

```
client.publishEvent (eventId="status", msgFormat="json",  
data=myData, qos=0 , onPublish=None)  
print ("Published data Successfully: %s", myData)  
time.sleep (2)  
client.commandCallback = myCommandCallback  
client.disconnect ()
```