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Smart Farm-IOT Enabled Smart Farming Application IBMNALAYATHIRAN

SPRINT DELIVERY 4

5.5 Receving command from IBM cloud using Python program import time import.

```
Sys


import ibmiot application


import ibmiotf device import


#provide your IBM Watson Device
Credentials   organization   =   "bnkhnl"   device   Type
="N0deMCU"
Deviceid = "12345" authMethod "token" "12345678"
# Initialize GPIO def
my command  call back(crtxl):
                    Print command received%s%
                    cmd data( command)status=cmd data(command)
                    if status =="motoron":
                    Print ("motor on is on") elif =="motoronoff"
                    Print ("motor on is off ")
                    Else;
                    Print("please send proper command")
                    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 anevent
of type "greeting" 10 times deviceCli.connect() while True:
      #Get Sensor Data from
DHT11
temp=random.randint(90,110)
Humid=random.randint(60,100)Mois=random.
Randint(20,120) data = { 'temp' : temp,
'Humid': Humid , 'Mois': Mois}
      #print data        def
myOnPublishCallback(
):
        print ("Published Temperature = %s C" % temp, "Humidity = %s %%"
%Humid, "Moisture =%s deg c" % Mois "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()
```