```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
import os
from twilio.rest import Client
account_sid = 'AC5a226c4cfb911efa753ef6f8e486d27a'
auth token = '494dd178c1bd36c06fa44301fca2b543'
client = Client(account_sid,auth_token)
#Provide your IBM Watson Device Credentials
organization = "rsu1tr"
deviceType = "sf"
deviceId = "smartfarm"
authMethod = "token"
authToken = "Q-1nP3j-JqTt4O7HyY"
# Initialize GPIO
def myCommandCallback(cmd): # function for Callback
print("Command received: %s" % cmd.data['command'])
status=cmd.data['command']
if status=='motoron':
print("Turn Motor ON")
elif status=='motoroff':
print("Turn Motor 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 data
deviceCli.connect()
while True:
#Get Sensor Data from DHT11
Temperature=random.randint(0,100)
Humidity=random.randint(0,100)
SoilMoisture=random.randint(30,65)#(Value = 50-60)
ph=random.randint(0,10)#Ph value (6.2-6.8)
data = { 'Temperature' : Temperature, 'Humidity': Humidity, 'SoilMoisture':SoilMoisture, 'Ph':ph}
#print data
def myOnPublishCallback():
      print ("Published Temperature = %s C" % Temperature, "Humidity = %s %%" %
Humidity, "SoilMoisture = %s %%" % SoilMoisture, "Ph = %s %%" % ph, "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)
if SoilMoisture==50:
print("Motor is ON")
 message = client.messages \
   .create(
from_ ='+18585440834',
body='Alert!!',
to = '+919498063191')
print(message.sid)
else:
print("Motor is OFF")
deviceCli.commandCallback = myCommandCallback
# Disconnect the device and application from the cloud
deviceCli.disconnect()
```