Python code :

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "o3esl6"
deviceType = "HAYAN24"
deviceId = "HAYAN24id"
authMethod = "token"
authToken = "hayanthika2411"

# Initialize GPIO

def myCommandCallback(cmd):
   print("Command received: %s" % cmd.data['command'])
   status=cmd.data['command']
   if status=="lighton":
      print ("led is on")
   elif status == "lightoff":
         print ("led 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 an event of type "greeting" 10 times
deviceCli.connect()


while True:
   #Get Sensor Data from DHT11


   temp=random.randint(90,110)
   Humid=random.randint(60,100)


   data = { 'temp' : temp, 'Humid': Humid }
   #print data
   def myOnPublishCallback():
      print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % Humid,"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()
```