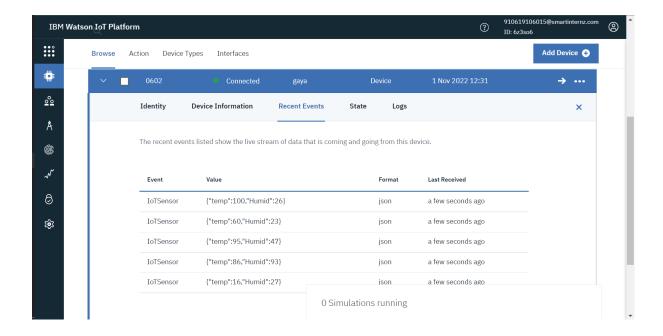
Team ID	PNT2022TMID11493
Project Title	Signs with Smart Connectivity for Better Road Safety



```
*Python 3.7.4 Shell*
File Edit Shell Debug Options Window Help
Published Temperature = 75 C Humidity = 99 % to IBM Watson
Published Temperature = 67 C Humidity = 16 % to IBM Watson
Published Temperature = 60 C Humidity = 81 % to IBM Watson
Published Temperature = 71 C Humidity = 64 % to IBM Watson
Published Temperature = 4 C Humidity = 29 % to IBM Watson
Published Temperature = 93 C Humidity = 37 % to IBM Watson
Published Temperature = 97 C Humidity = 15 % to IBM Watson
Published Temperature = 85 C Humidity = 20 % to IBM Watson
Published Temperature = 9 C Humidity = 23 % to IBM Watson
Published Temperature = 10 C Humidity = 23 % to IBM Watson
Published Temperature = 43 C Humidity = 63 % to IBM Watson
Published Temperature = 45 C Humidity = 21 % to IBM Watson
Published Temperature = 19 C Humidity = 29 % to IBM Watson
Published Temperature = 29 C Humidity = 43 \% to IBM Watson
Published Temperature = 13 C Humidity = 32 % to IBM Watson
Published Temperature = 68 C Humidity = 96 % to IBM Watson
Published Temperature = 74 C Humidity = 85 \% to IBM Watson
Published Temperature = 82 C Humidity = 60 % to IBM Watson
Published Temperature = 20 C Humidity = 100 \% to IBM Watson
Published Temperature = 35 C Humidity = 85 % to IBM Watson
Published Temperature = 9 C Humidity = 91 % to IBM Watson
Published Temperature = 89 C Humidity = 19 % to IBM Watson
Published Temperature = 29 C Humidity = 50 % to IBM Watson
Published Temperature = 56 C Humidity = 45 % to IBM Watson
Published Temperature = 57 C Humidity = 18 % to IBM Watson
Published Temperature = 10 C Humidity = 3 % to IBM Watson
Published Temperature = 27 C Humidity = 94 % to IBM Watson
Published Temperature = 10 C Humidity = 67 \% to IBM Watson
Published Temperature = 11 C Humidity = 95 % to IBM Watson
Published Temperature = 80 C Humidity = 68 % to IBM Watson
Published Temperature = 27 C Humidity = 100 % to IBM Watson
```

Python Code:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "6z3so6"
deviceType = "gaya"
deviceId = "0602"
authMethod = "token"
authToken = "gaya12345"
# Initialize GPIO
def myCommandCallback(cmd):
  print("Command received: %s" % cmd.data['command'])
  status=cmd.data['command']
  if status=="switchon":
    print ("Switch is on")
```

```
else:
    print ("Switch is 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 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(0,100)
    Humid=random.randint(0,100)
    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(1)
    deviceCli.commandCallback = myCommandCallback
# Disconnect the device and application from the cloud
deviceCli.disconnect()
```