**Sprint – 1**

**Hazardous Area Monitoring for Industrial Plant powered by IoT**

**Team ID: PNT2022TMID41953**

**Python Code:**

# Team ID: PNT2022TMID41953

import time import sys

import ibmiotf.application import ibmiotf.device import random

#Provide your IBM Watson Device Credentials organization = "lcft5g" deviceType = "Final" deviceId = "Hello" authMethod = "token" authToken = "8300113450"

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)

Gas=random.randint(0,100)

data = { 'temp' : temp, 'Humid': Humid,’Gas’:gas }

#print data def myOnPublishCallback():

print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % Humid, “Gas Concentration = %s”%Gas"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()

**Output:**

