

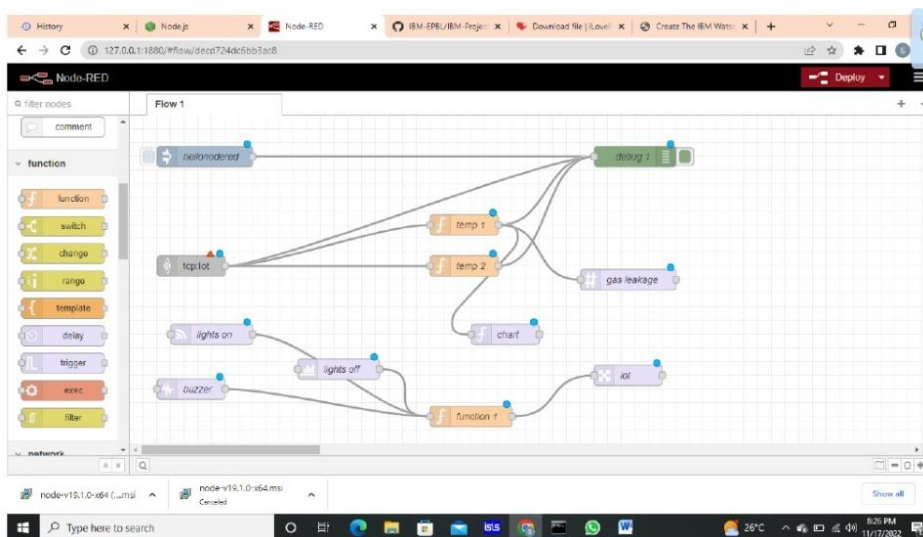
SPRINT 4

TEAM ID: PNT2022TMID11052

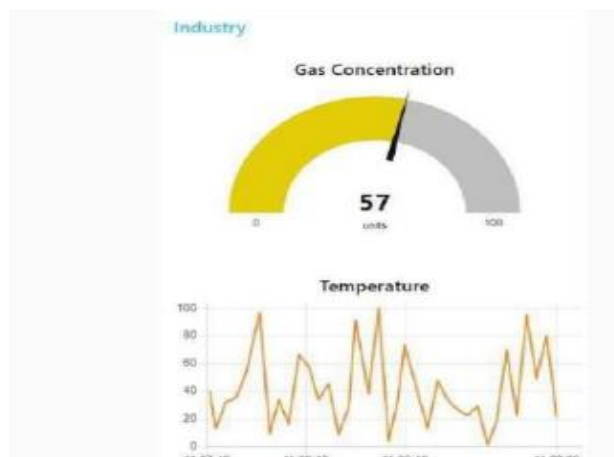
Gas Leakage monitoring & alerting system for Industries

NODE RED UI:

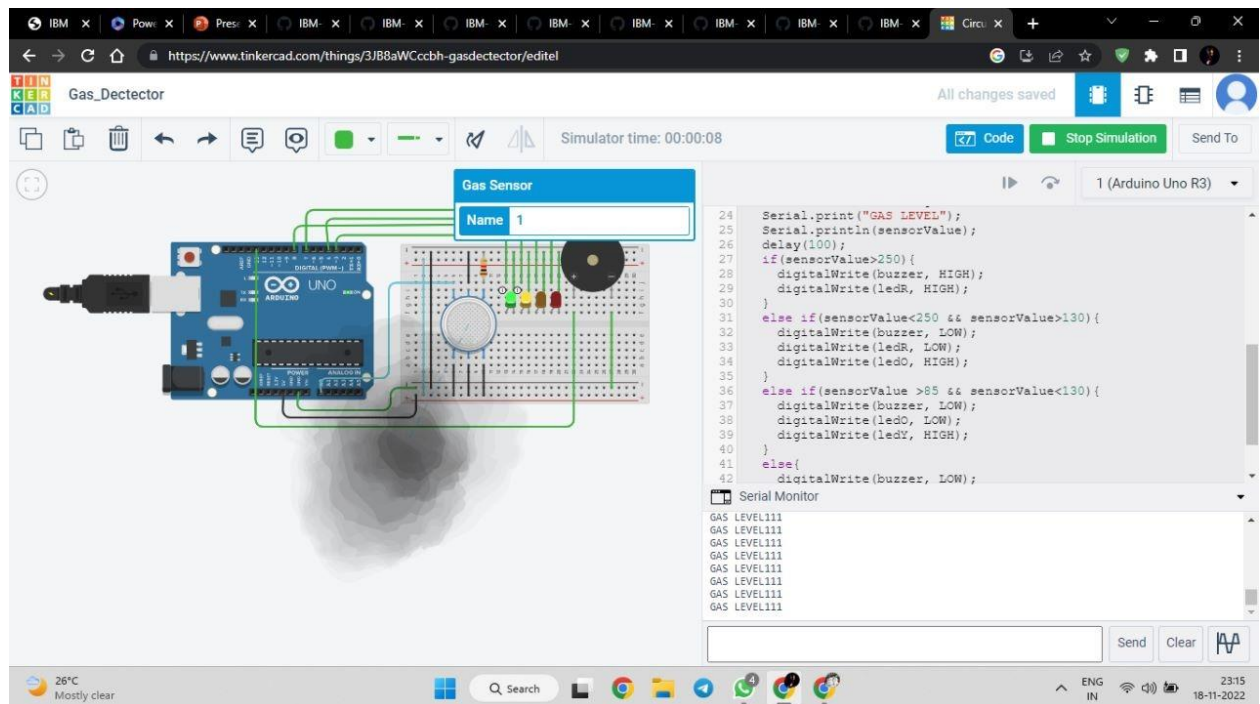
Node-red-dashboard



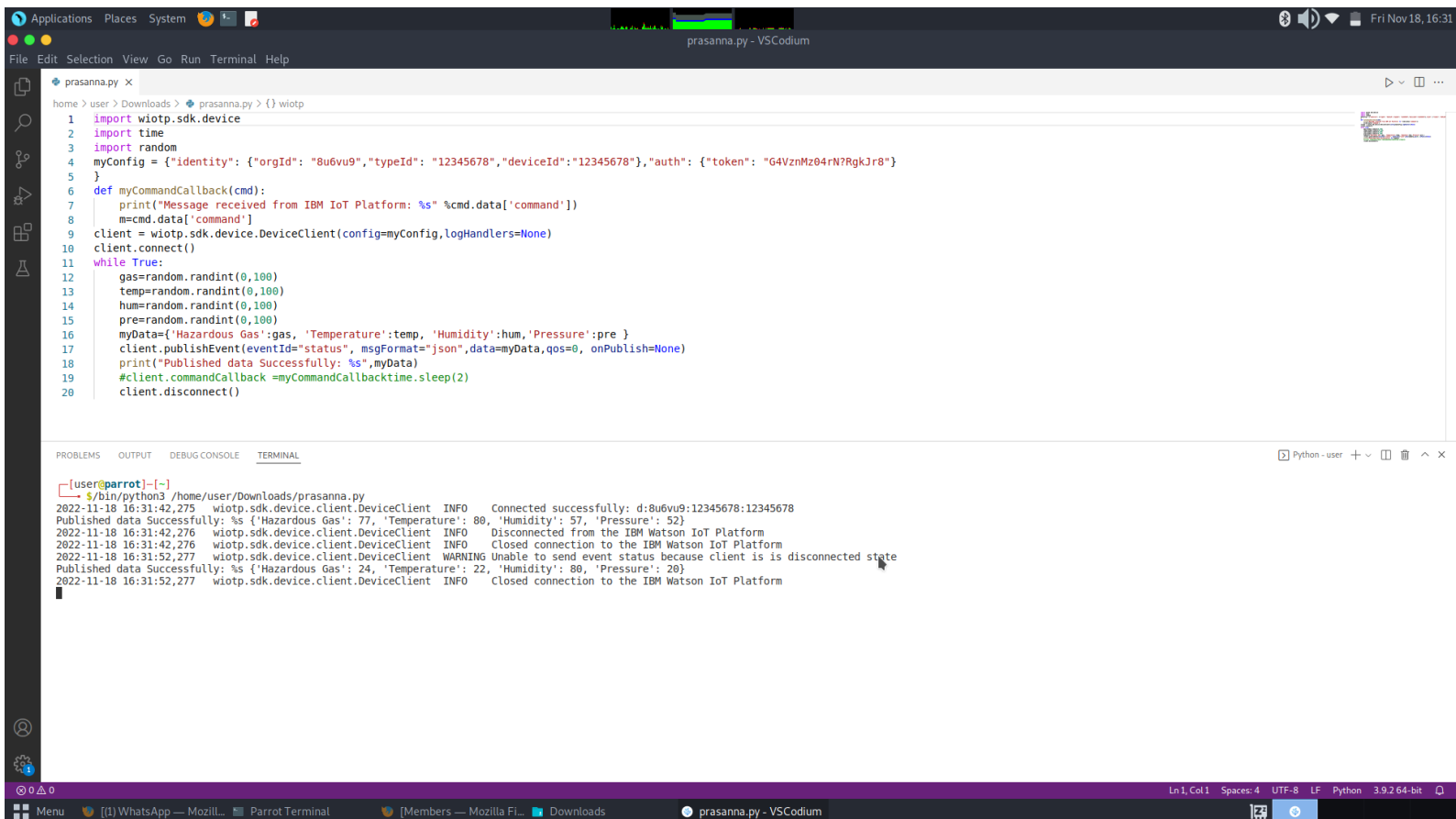
Node-red output:-



Tinker cad:-



Python code output:-



The image shows a screenshot of a VS Code editor window with a Python script named `prasanna.py` and its terminal output. The script uses the `wiotp.sdk.device` module to connect to the IBM Watson IoT Platform and publish data.

```
1 import wiotp.sdk.device
2 import time
3 import random
4 myConfig = {'identity': {'orgId': '8u6vu9', 'typeId': '12345678', 'deviceId': '12345678'}, 'auth': {'token': 'G4VznMz04rN7RgkJr8'}}
5 }
6 def myCommandCallback(cmd):
7     print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
8     m=cmd.data['command']
9 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
10 client.connect()
11 while True:
12     gas=random.randint(0,100)
13     temp=random.randint(0,100)
14     hum=random.randint(0,100)
15     pre=random.randint(0,100)
16     myData={'Hazardous Gas':gas, 'Temperature':temp, 'Humidity':hum, 'Pressure':pre }
17     client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
18     print("Published data Successfully: %s", myData)
19     #client.commandCallback = myCommandCallbacktime.sleep(2)
20 client.disconnect()
```

The terminal output shows the execution of the script, including successful connections, data publishing, and disconnections.

```
[user@parrot]~$ /bin/python3 /home/user/Downloads/prasanna.py
2022-11-18 16:31:42,275 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:8u6vu9:12345678:12345678
Published data Successfully: %s {'Hazardous Gas': 77, 'Temperature': 80, 'Humidity': 57, 'Pressure': 52}
2022-11-18 16:31:42,276 wiotp.sdk.device.client.DeviceClient INFO Disconnected from the IBM Watson IoT Platform
2022-11-18 16:31:42,276 wiotp.sdk.device.client.DeviceClient INFO Closed connection to the IBM Watson IoT Platform
2022-11-18 16:31:52,277 wiotp.sdk.device.client.DeviceClient WARNING Unable to send event status because client is is disconnected state
Published data Successfully: %s {'Hazardous Gas': 24, 'Temperature': 22, 'Humidity': 80, 'Pressure': 20}
2022-11-18 16:31:52,277 wiotp.sdk.device.client.DeviceClient INFO Closed connection to the IBM Watson IoT Platform
```