Assignment 3

Develop a code to upload the water tank level and light intensity values to the IBM IoT platform and visualize them in the web application.
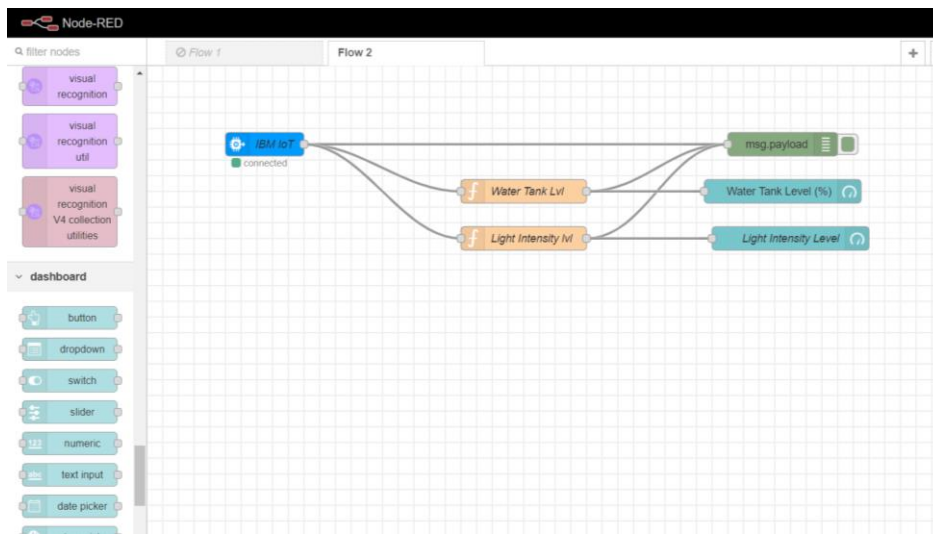
Code:

```python
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "hlj5ww",
        "typeId": "Water_Light",
        "deviceId":"12345"
    },
    "auth": {
        "token": "7903051892"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    water=random.randint(0,100)
    light=random.randint(0,100)
    myData={'water_tank':water,'light_intensity':light}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```
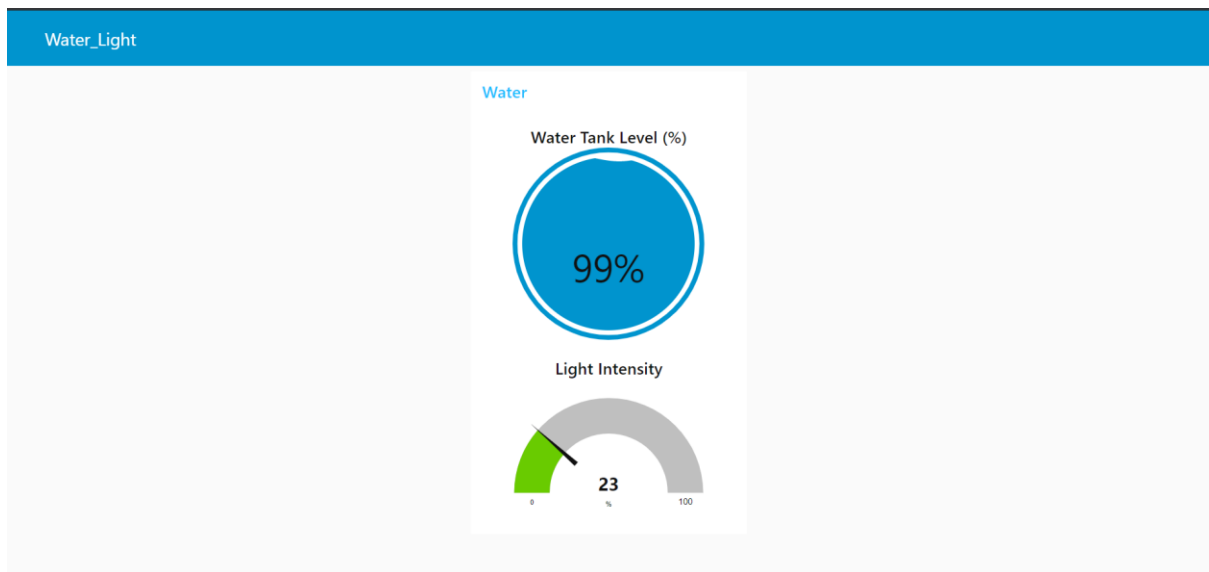
Node-red Application Flow:

Debug Menu

Web UI:

Type of dashboard output used for :

Water Tank Level (%) : Gauge(Level)

Light Intensit   : Gauge