

Python Code

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GNU nano 5.4 iot.py
import wiotp.sdk.device
import time
import random

myConfig = {
    "identity": {
        "orgId": "e9psgv",
        "typeId": "RIFFT",
        "deviceId": "2001"
    },
    "auth": {
        "token": "12345678"
    }
}

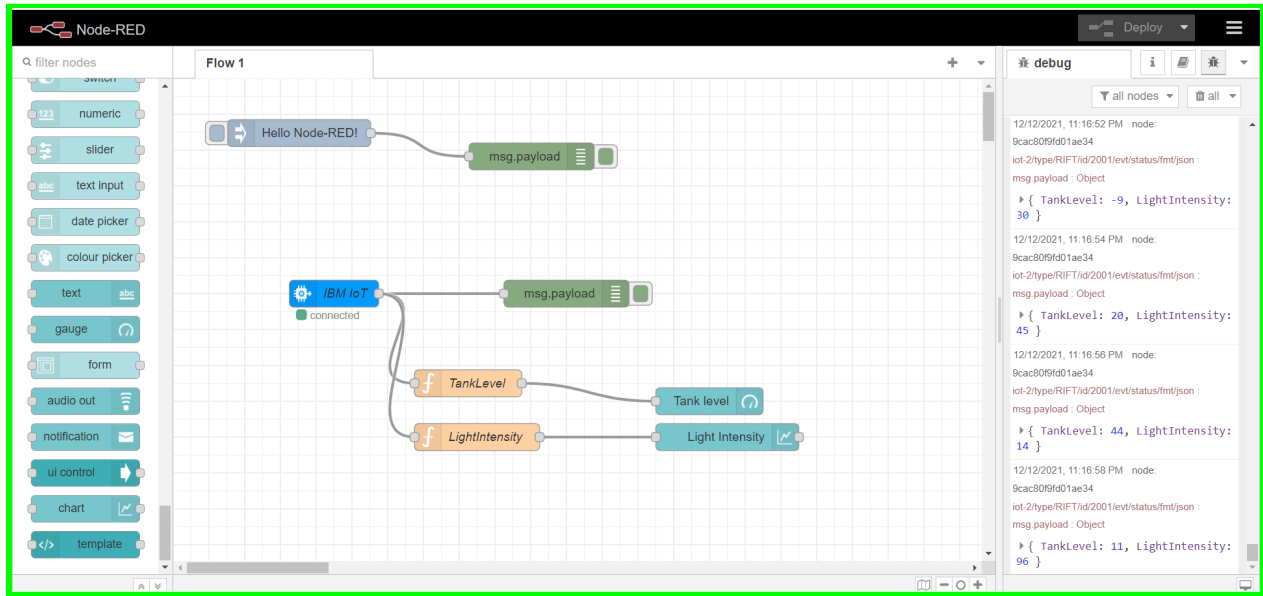
def myCommandCallback(cmd):
    print("Message recieved from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

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

while True:
    tanklvl=random.randint(-20,125)
    lightint=random.randint(0,100)
    myData={'TankLevel':tanklvl, 'LightIntensity': lightint}
    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()
```

```
iot.py
Published Data Successfully: %s {'TankLevel': 86, 'LightIntensity': 74}
Published Data Successfully: %s {'TankLevel': 79, 'LightIntensity': 55}
Published Data Successfully: %s {'TankLevel': 87, 'LightIntensity': 16}
Published Data Successfully: %s {'TankLevel': 79, 'LightIntensity': 95}
Published Data Successfully: %s {'TankLevel': 53, 'LightIntensity': 60}
Published Data Successfully: %s {'TankLevel': 54, 'LightIntensity': 11}
Published Data Successfully: %s {'TankLevel': 52, 'LightIntensity': 98}
Published Data Successfully: %s {'TankLevel': -11, 'LightIntensity': 36}
Published Data Successfully: %s {'TankLevel': 77, 'LightIntensity': 22}
Published Data Successfully: %s {'TankLevel': 125, 'LightIntensity': 79}
Published Data Successfully: %s {'TankLevel': 2, 'LightIntensity': 88}
Published Data Successfully: %s {'TankLevel': 79, 'LightIntensity': 15}
Published Data Successfully: %s {'TankLevel': 36, 'LightIntensity': 7}
Published Data Successfully: %s {'TankLevel': -1, 'LightIntensity': 55}
Published Data Successfully: %s {'TankLevel': 42, 'LightIntensity': 42}
Published Data Successfully: %s {'TankLevel': 94, 'LightIntensity': 26}
Published Data Successfully: %s {'TankLevel': 28, 'LightIntensity': 2}
Published Data Successfully: %s {'TankLevel': -1, 'LightIntensity': 86} and'')
Published Data Successfully: %s {'TankLevel': -11, 'LightIntensity': 37}
Published Data Successfully: %s {'TankLevel': 102, 'LightIntensity': 44}
Published Data Successfully: %s {'TankLevel': -13, 'LightIntensity': 14}
Published Data Successfully: %s {'TankLevel': 12, 'LightIntensity': 14}
Published Data Successfully: %s {'TankLevel': 0, 'LightIntensity': 80}
Published Data Successfully: %s {'TankLevel': 108, 'LightIntensity': 5}
Published Data Successfully: %s {'TankLevel': 106, 'LightIntensity': 16}
Published Data Successfully: %s {'TankLevel': -13, 'LightIntensity': 81}
Published Data Successfully: %s {'TankLevel': 84, 'LightIntensity': 67}
Published Data Successfully: %s {'TankLevel': 8, 'LightIntensity': 70}, qos=0 , onPublish=None)
Published Data Successfully: %s {'TankLevel': -9, 'LightIntensity': 94}
Published Data Successfully: %s {'TankLevel': 122, 'LightIntensity': 7}
Published Data Successfully: %s {'TankLevel': 15, 'LightIntensity': 89}
Published Data Successfully: %s {'TankLevel': 77, 'LightIntensity': 8}
Published Data Successfully: %s {'TankLevel': 56, 'LightIntensity': 26}
Published Data Successfully: %s {'TankLevel': 109, 'LightIntensity': 64}
Published Data Successfully: %s {'TankLevel': -17, 'LightIntensity': 35}
Published Data Successfully: %s {'TankLevel': 6, 'LightIntensity': 49}
Published Data Successfully: %s {'TankLevel': -3, 'LightIntensity': 0}
```

Node Red



Device ID	Status	Device Type	Class ID	Date Added
2001	Disconnected	RIFT	Device	12 Dec 2021 19:54
Identity	Device Information	Recent Events	State	Logs
The recent events listed show the live stream of data that is coming and going from this device.				
Event	Value	Format	Last Received	
status	{"TankLevel":79,"LightIntensity":95}	json	a few seconds ago	
status	{"TankLevel":87,"LightIntensity":16}	json	a few seconds ago	
status	{"TankLevel":79,"LightIntensity":55}	json	a few seconds ago	
status	{"TankLevel":86,"LightIntensity":74}	json	a few seconds ago	
status	{"TankLevel":1,"LightIntensity":76}	json	a few seconds ago	

Web UI

ASSESSMENT 3

