

การสร้าง MQTT Server บน Raspberry Pi เพื่อใช้งาน Chatbot LINE ในฟาร์มอัจฉริยะ
Chatbot LINE from Raspberry Pi MQTT Server for Smart Farming

ชื่อ-สกุล : นายอดิชาติ ภูนิเทศ

6/6 - คำถามท้ายบทเพื่อทดสอบความเข้าใจ

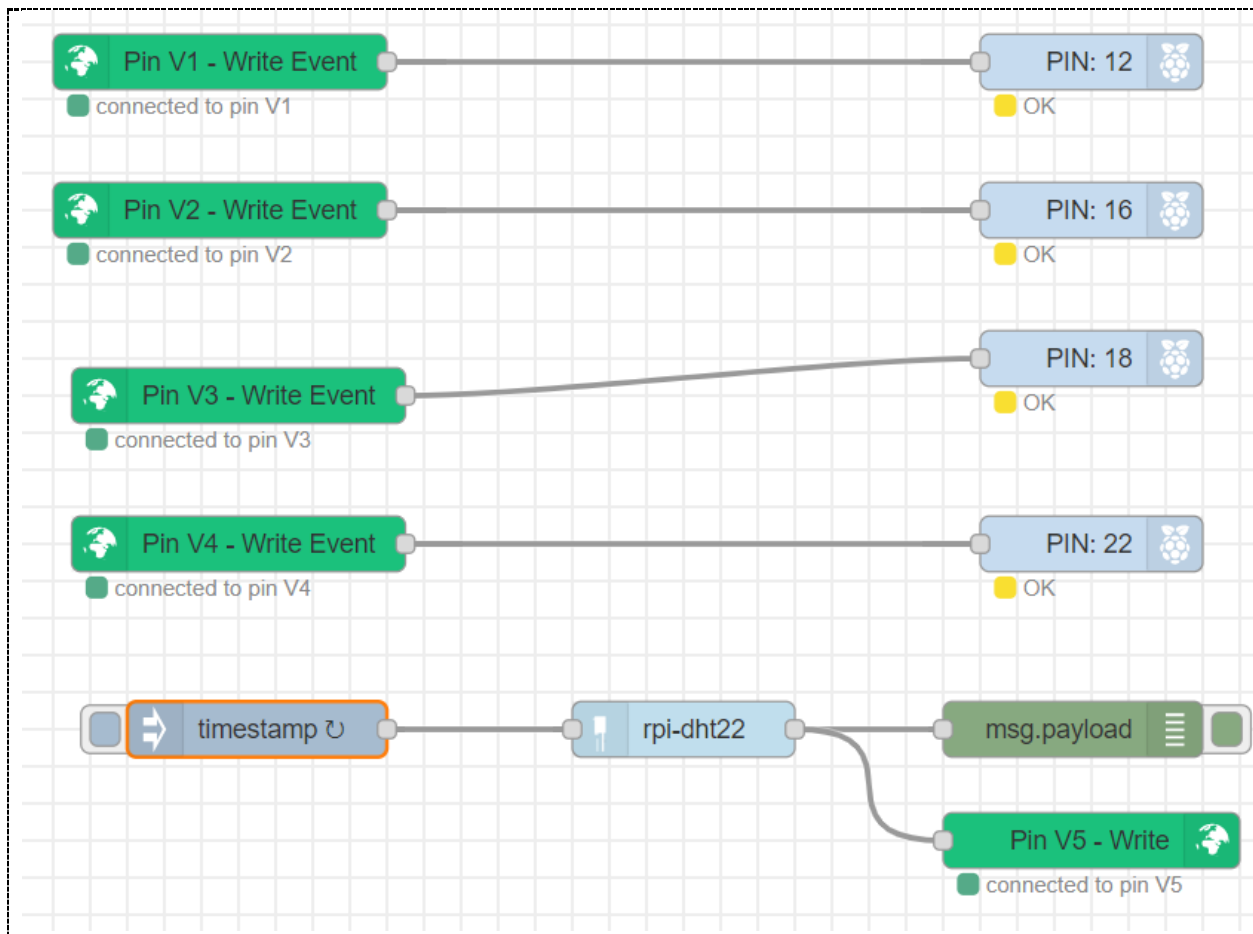
Quiz_301 – Blynk with Node-RED

- ทดสอบควบคุม 4 LED ด้วย Raspberry Pi ผ่าน Node-RED
- เพิ่มเติมให้ส่งข้อมูล Temperature ไปแสดงที่ Gauge บน Blynk

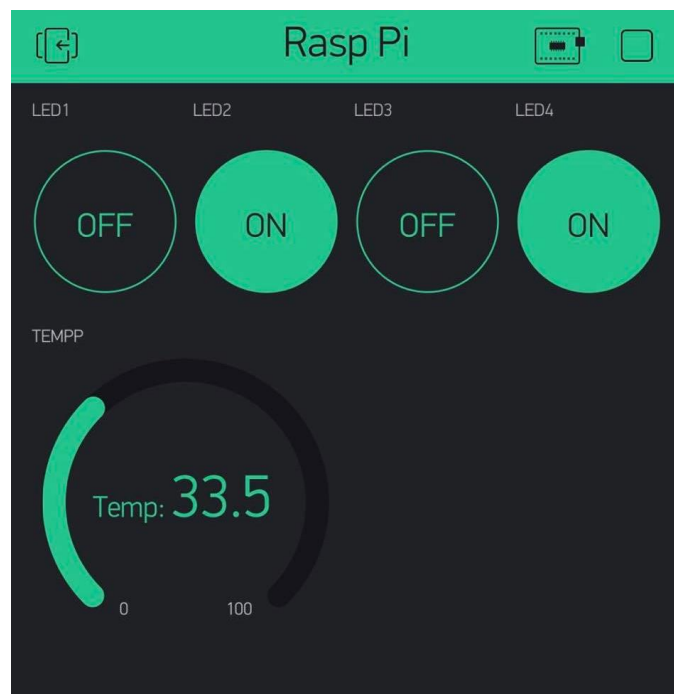
Node-RED Code

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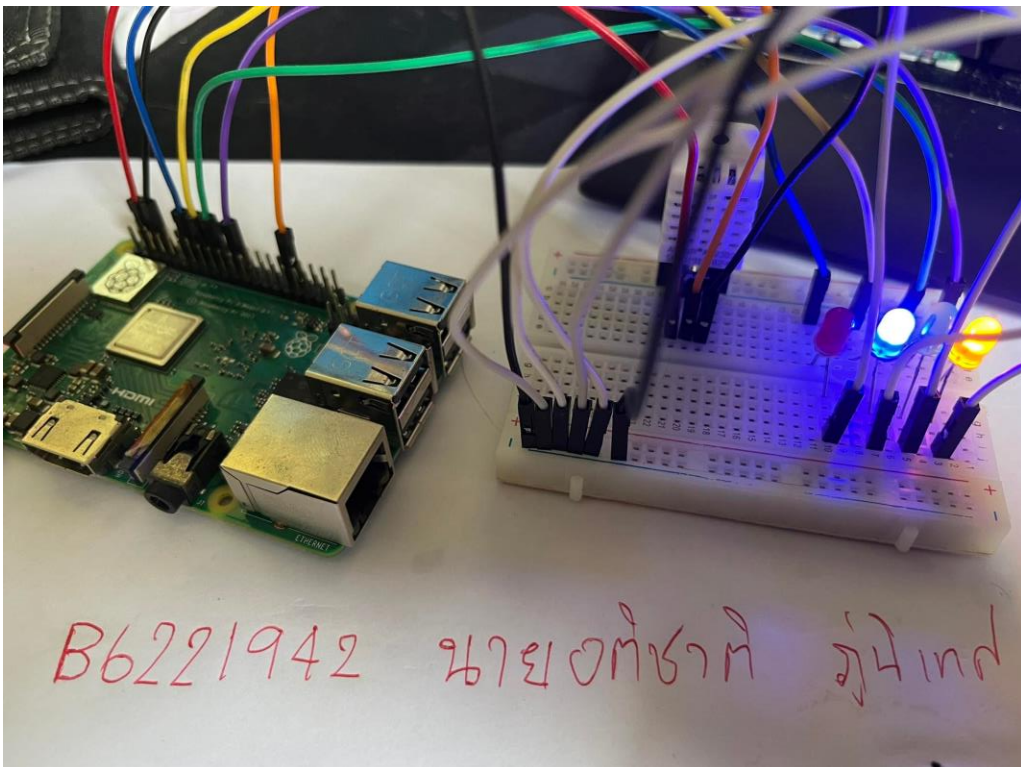
Node-RED Flow



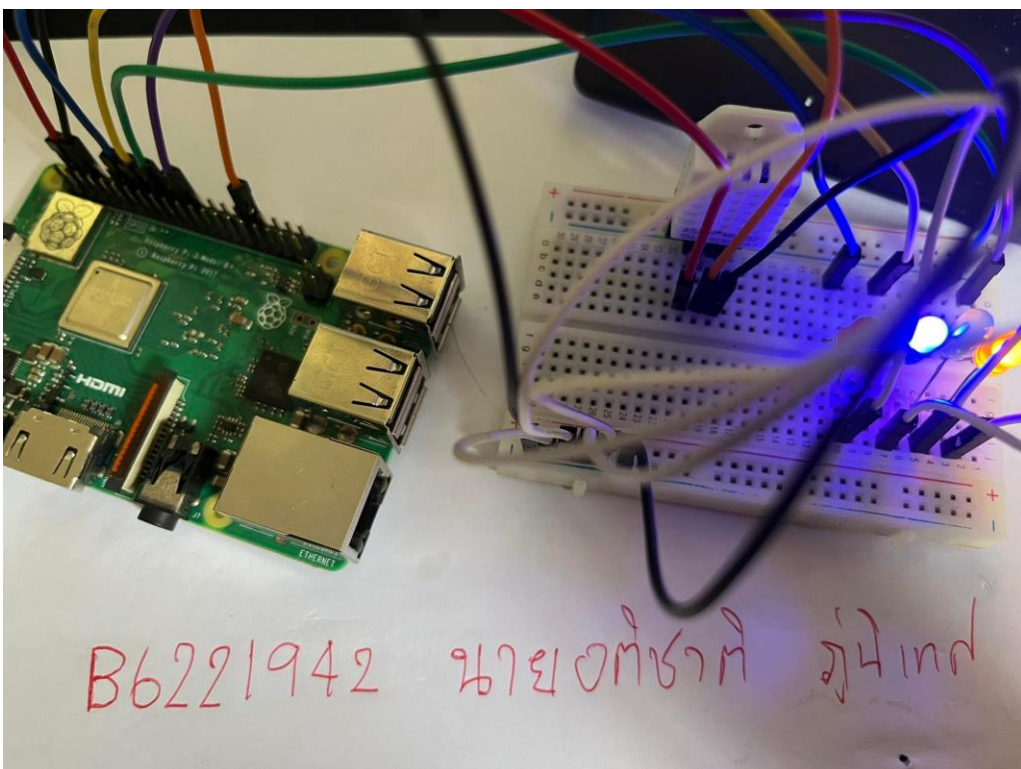
หน้าจอ Blynk



รูปการทดสอบ 1



รูปการทดสอบ 2



Quiz_302 – MQTT Client with Node-RED

- ทดสอบควบคุม 4 LED ด้วย Raspberry Pi ผ่าน Node-RED
- เพิ่มเติมให้ส่งข้อมูล Temperature ไปแสดงที่ บน Server

Node-RED Code

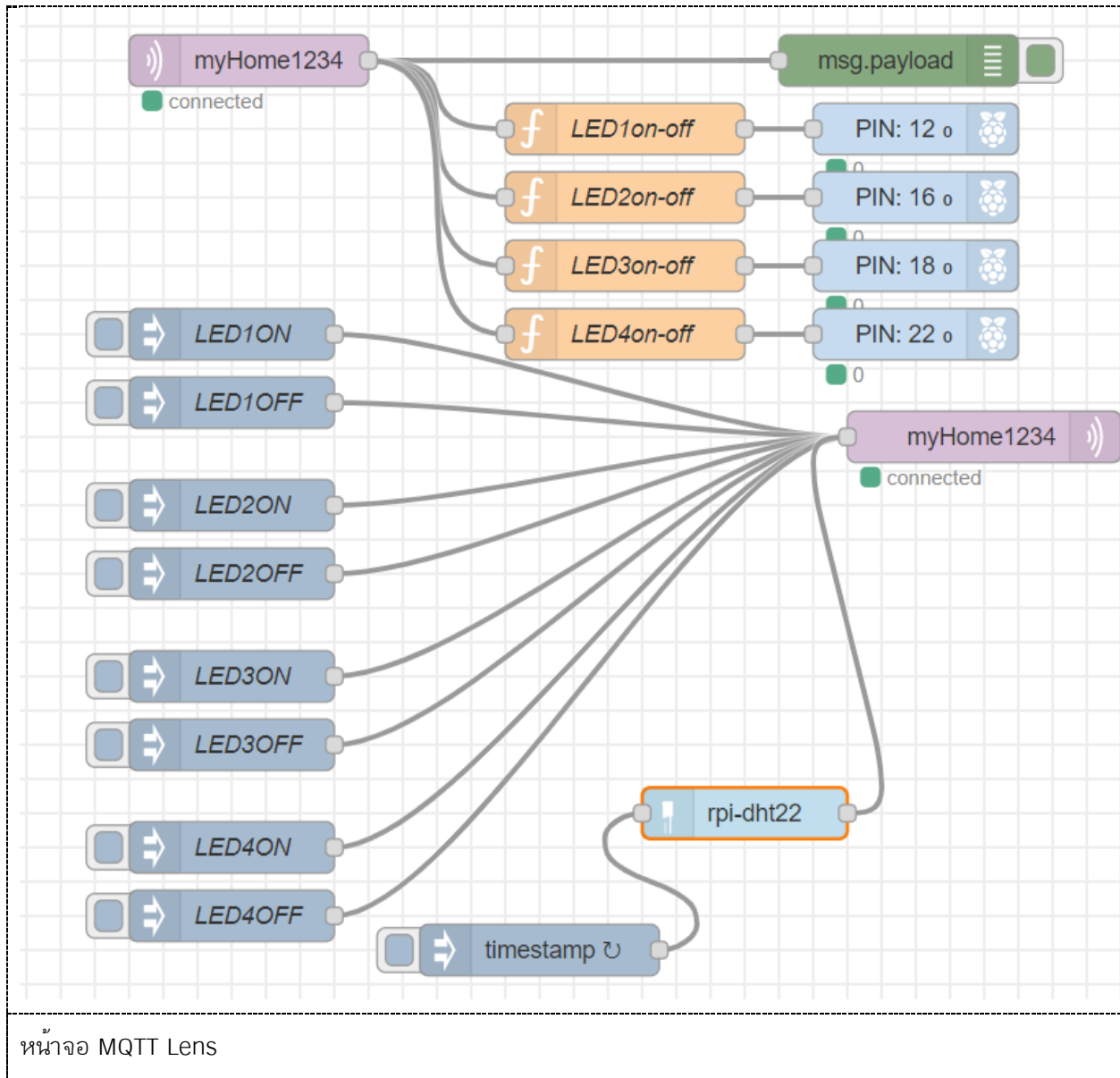
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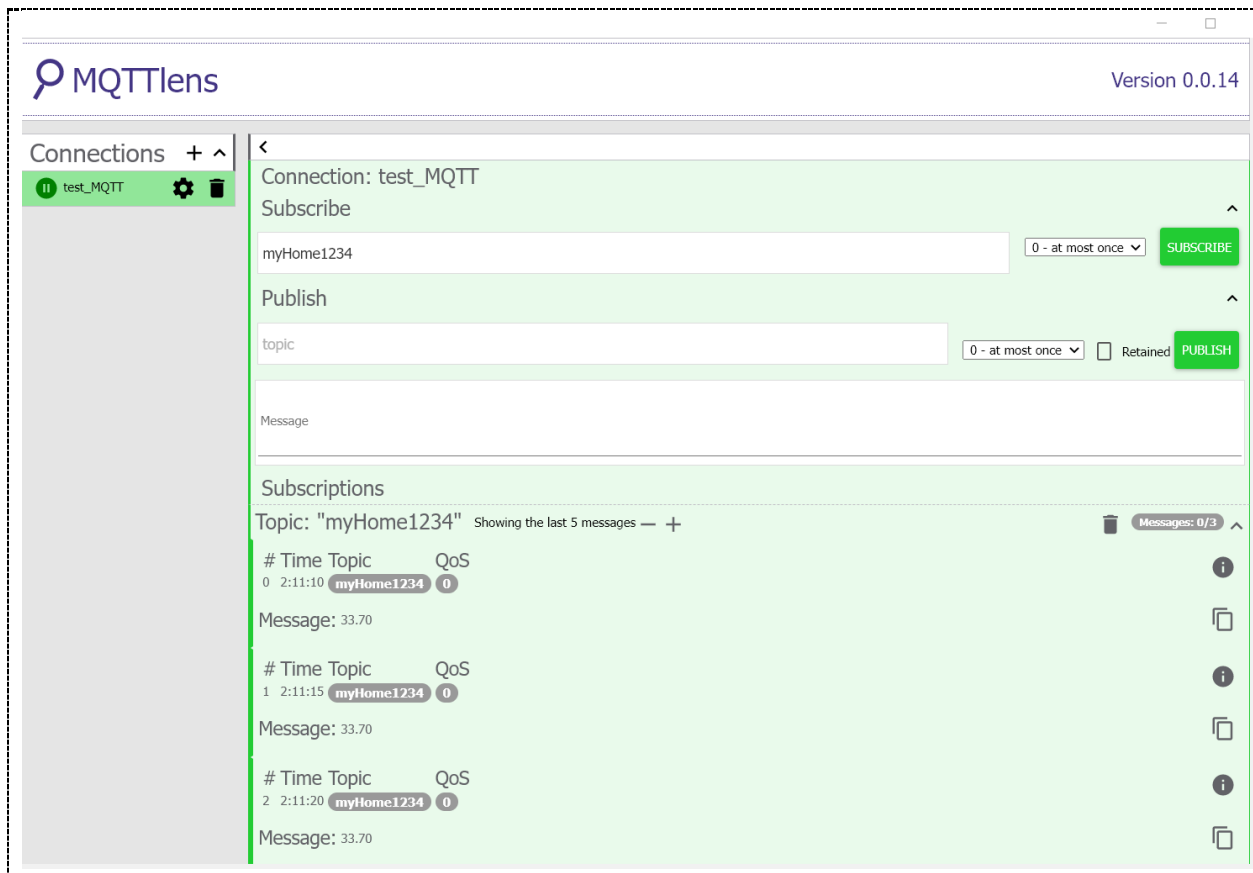
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Node-RED Flow



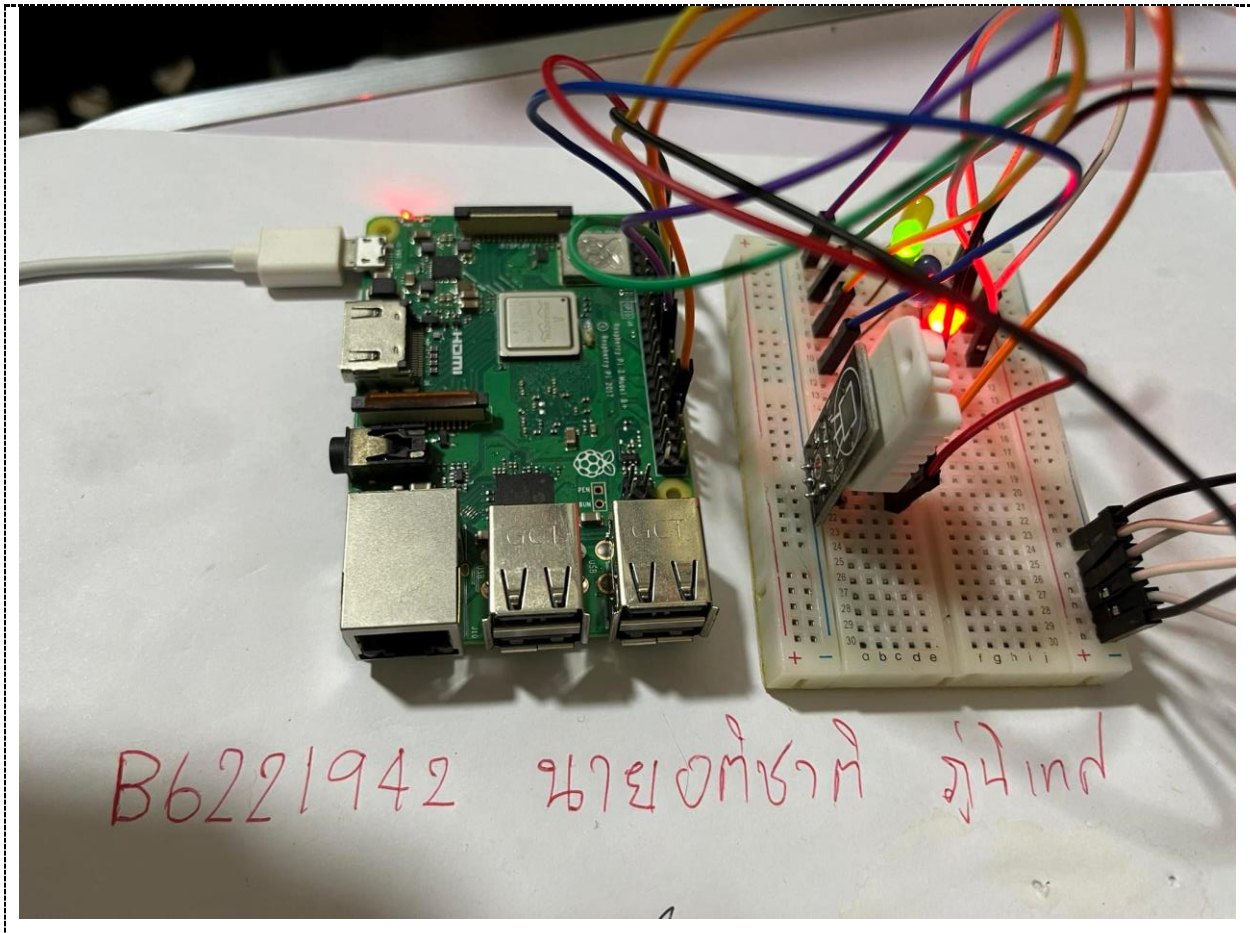
หน้าจอ MQTT Lens



รูปการทดสอบ 1



รูปการทดสอบ 2



Quiz_303 – MQTT Server on Raspberry Pi

- ทดสอบควบคุม 4 LED ด้วย Raspberry Pi ผ่าน Node-RED ไปยัง private server
- เพิ่มเติมนำส่งข้อมูล Temperature ไปแสดงที่ บน private Server

โปรแกรมที่ใช้ทดสอบ

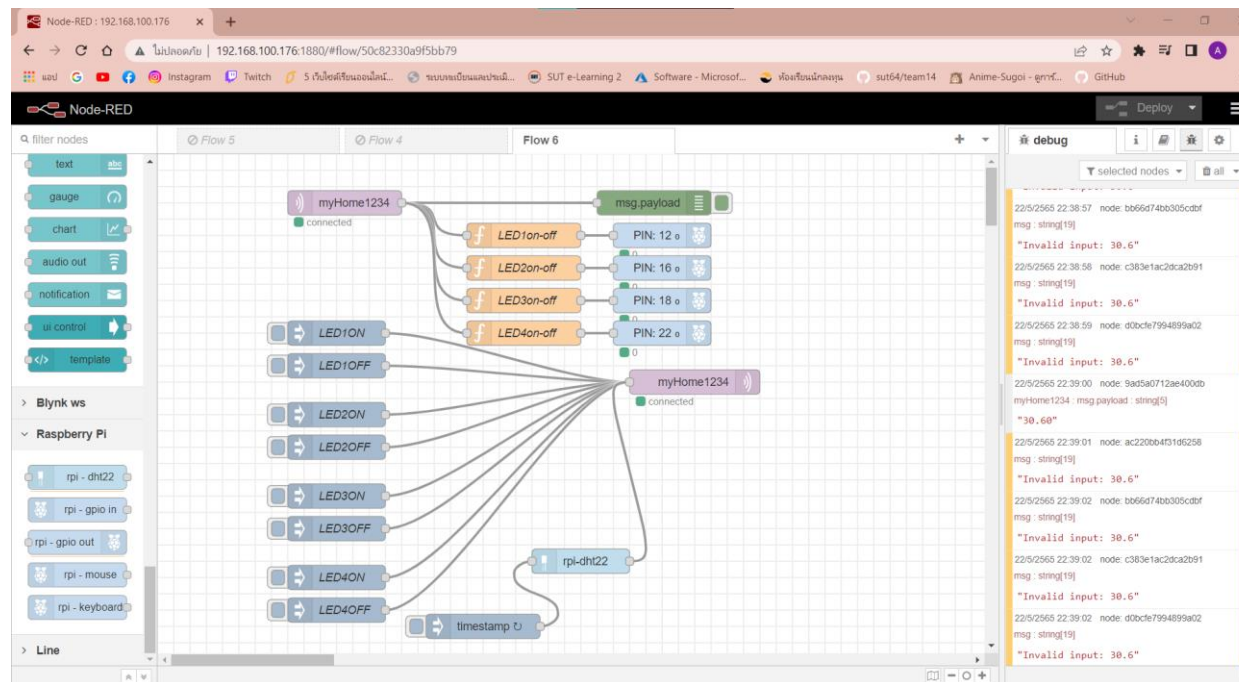
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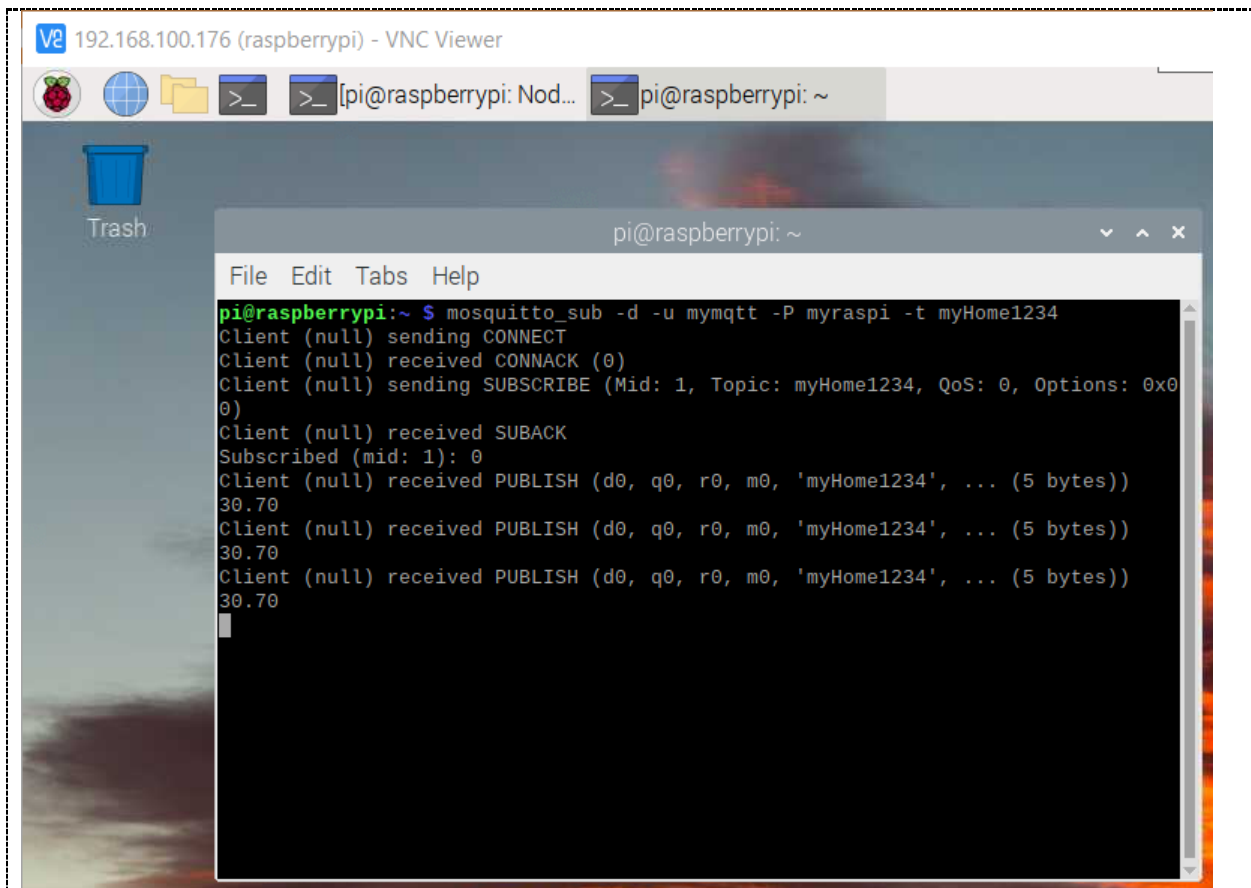
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รูปถ่ายหน้า Web Browser



รูปการทดสอบ 1



192.168.100.176 (raspberrypi) - VNC Viewer

pi@raspberrypi: ~

```
File Edit Tabs Help
pi@raspberrypi:~ $ mosquitto_sub -d -u mymqtt -P myraspi -t myHome1234
Client (null) sending CONNECT
Client (null) received CONNACK (0)
Client (null) sending SUBSCRIBE (Mid: 1, Topic: myHome1234, QoS: 0, Options: 0x00)
Client (null) received SUBACK
Subscribed (mid: 1): 0
Client (null) received PUBLISH (d0, q0, r0, m0, 'myHome1234', ... (5 bytes))
30.70
Client (null) received PUBLISH (d0, q0, r0, m0, 'myHome1234', ... (5 bytes))
30.70
Client (null) received PUBLISH (d0, q0, r0, m0, 'myHome1234', ... (5 bytes))
30.70
```

รูปการทดสอบ 2

