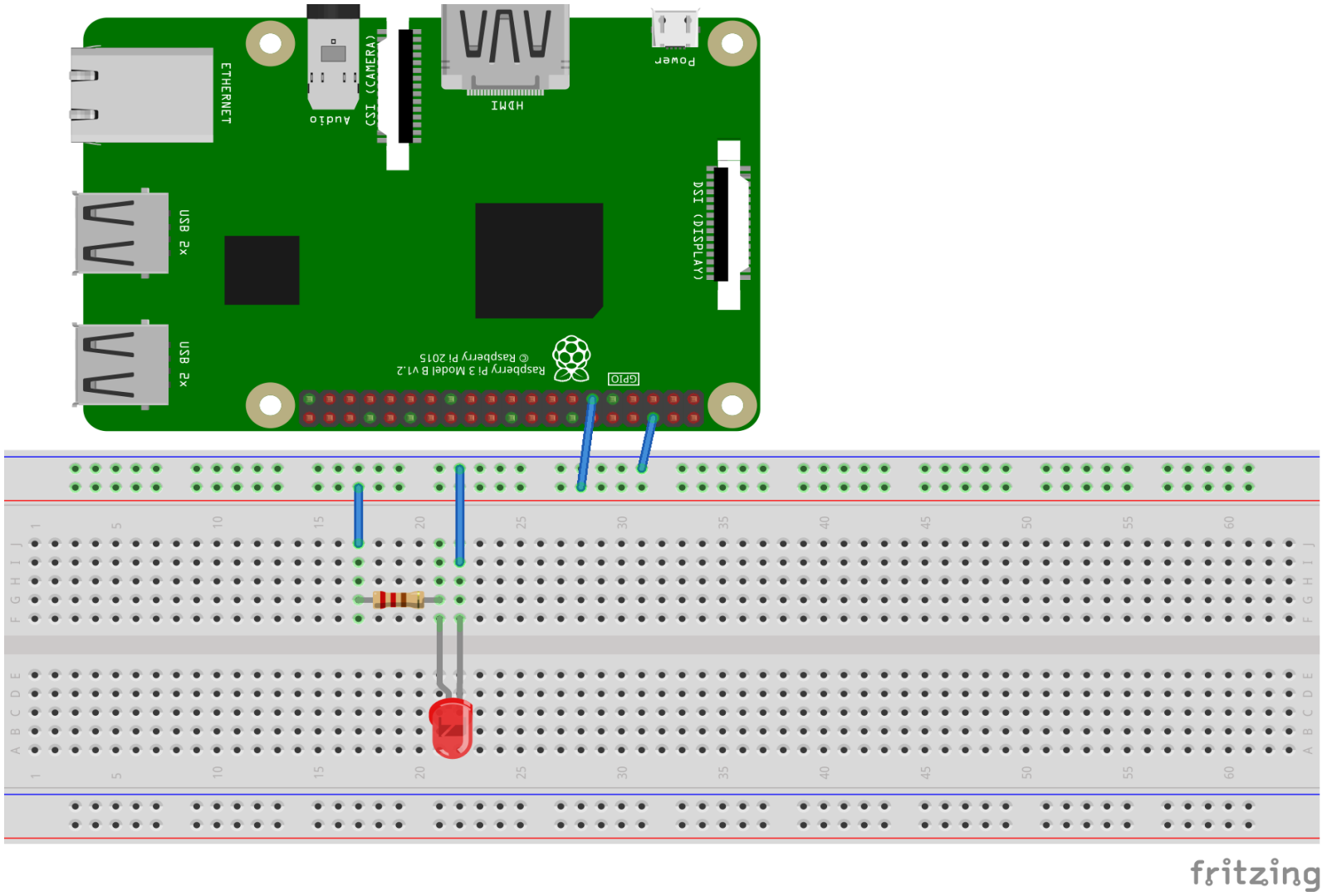
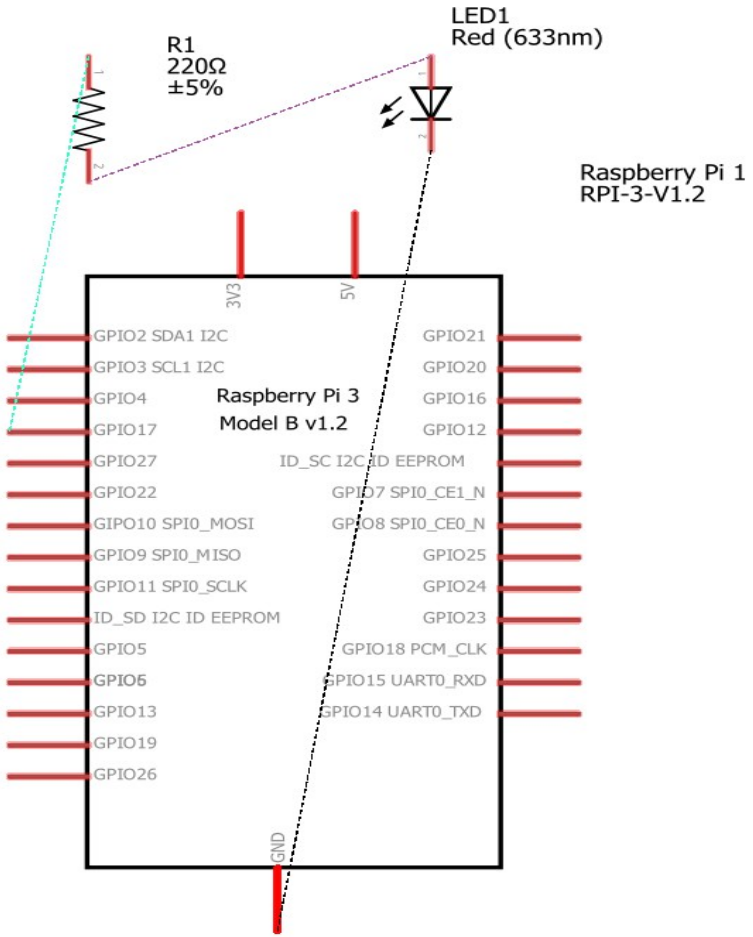
Node-RED Blinking LEDs

Week 3
Hackerspace Charlotte
Lisa Waugh

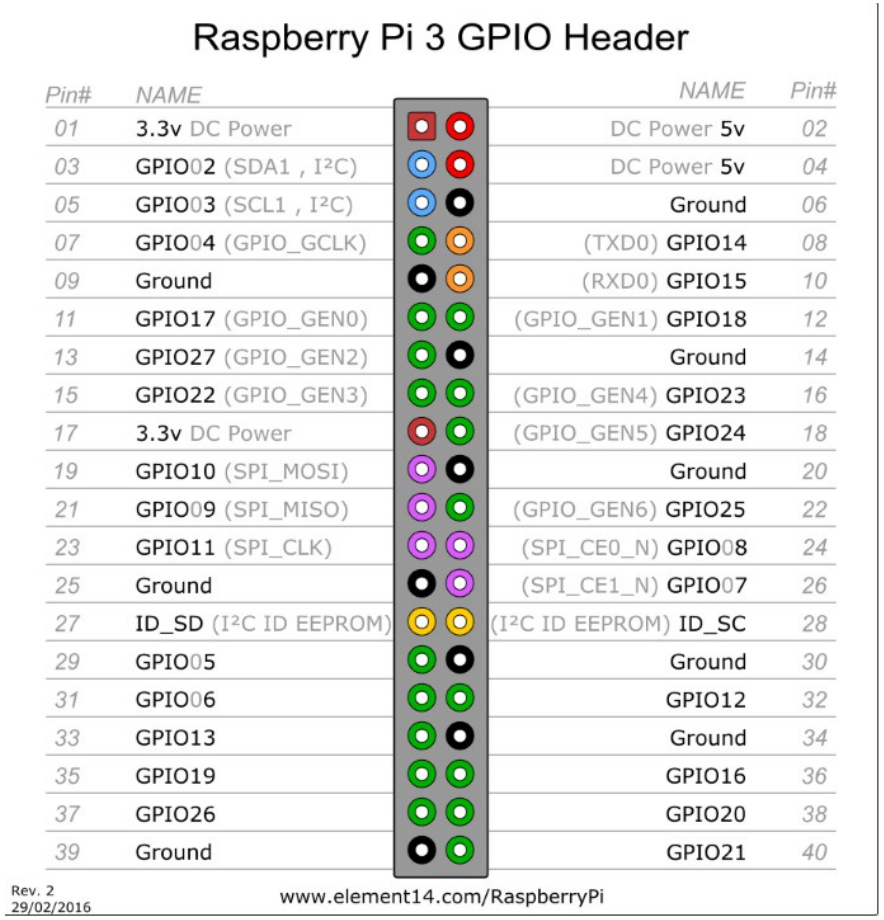
Wire LED and Resistor



Wiring Schematic



Raspberry Pi Pin Layout

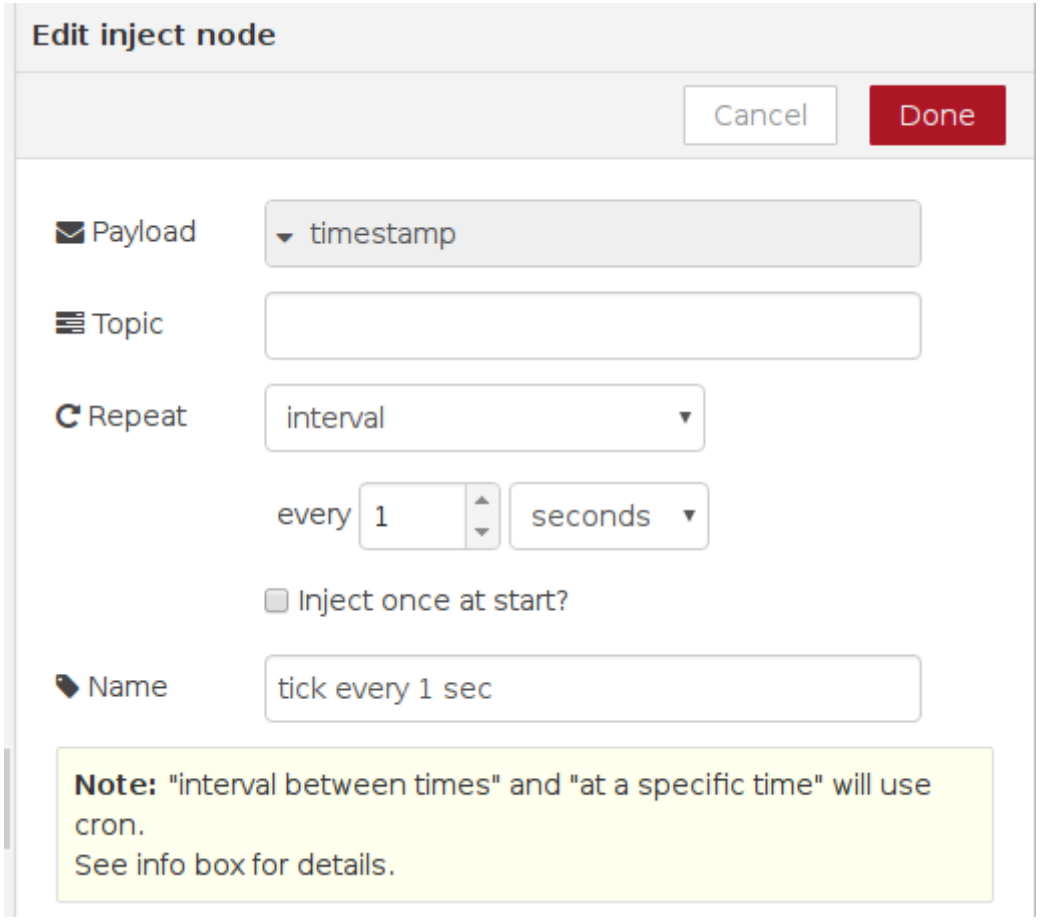


Start Node-RED

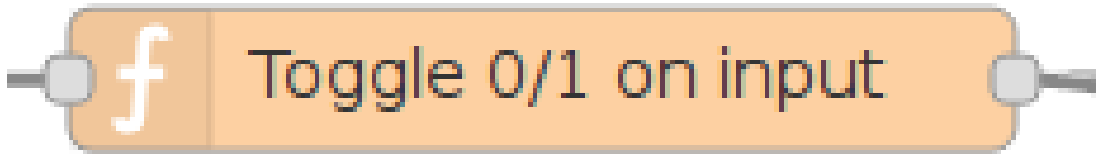
- Click on the Raspberry in top left corner
- Select Programming
- Select Node-RED
- A command window will open and Node-RED console will appear
- Open Firefox or Chromium
- localhost:1880

Add Inject node

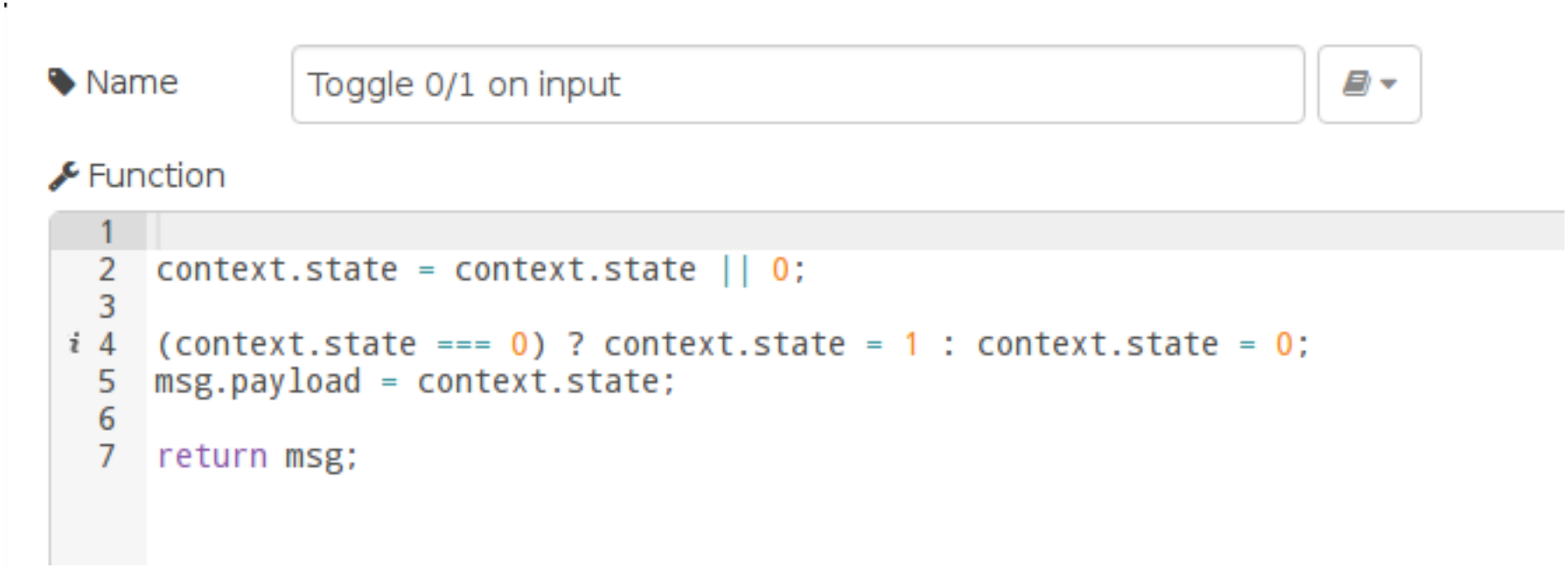
Configure inject node



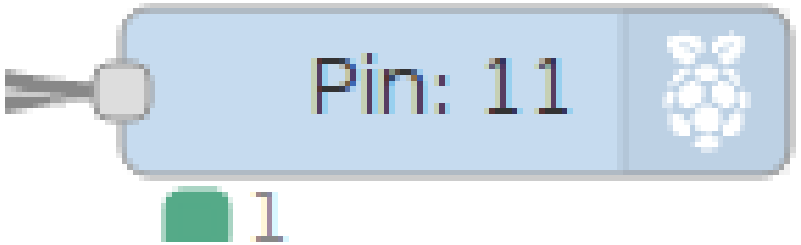
Add function Node



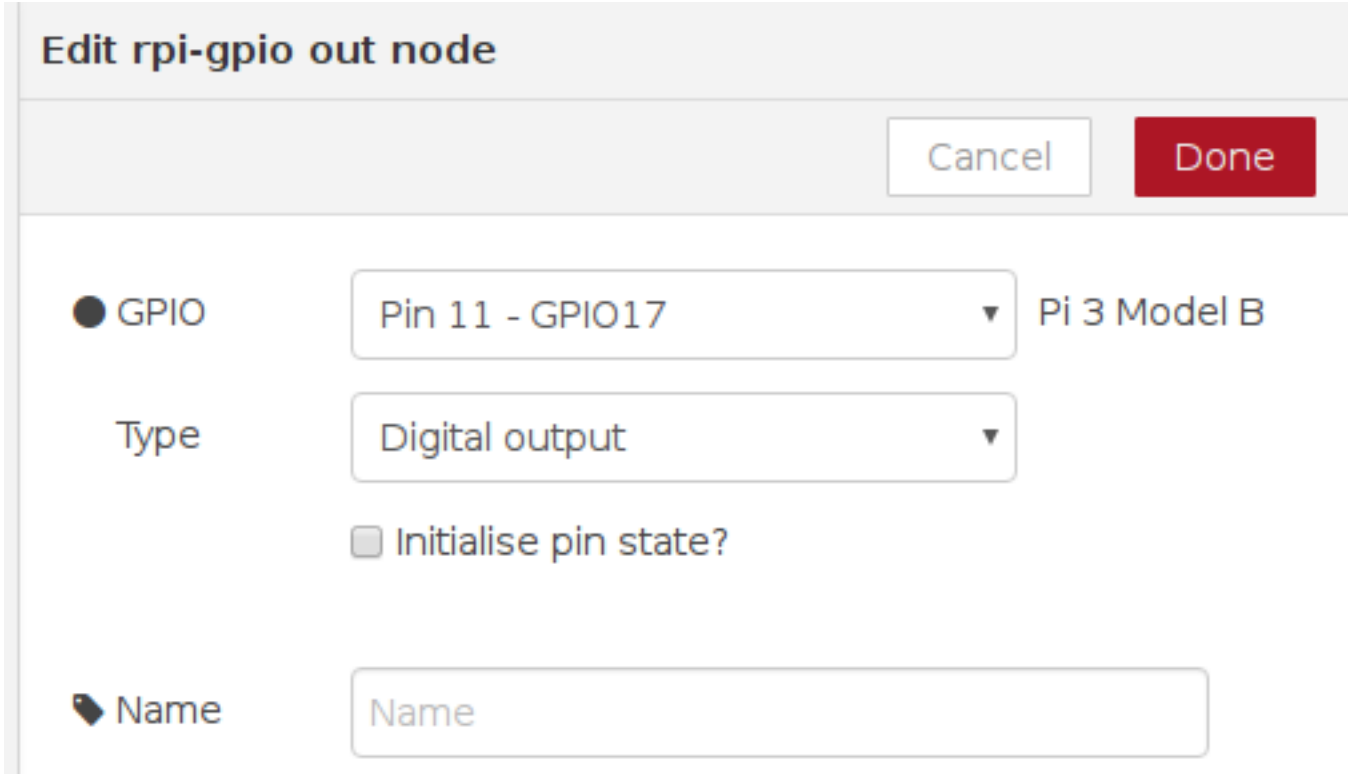
Configure function node



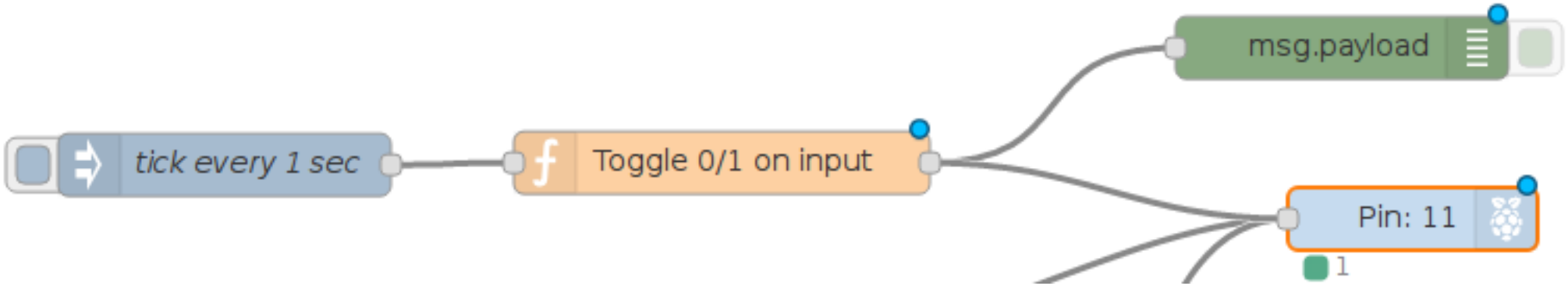
Add rpi-gpio out node



Configure rpi-gpio out node



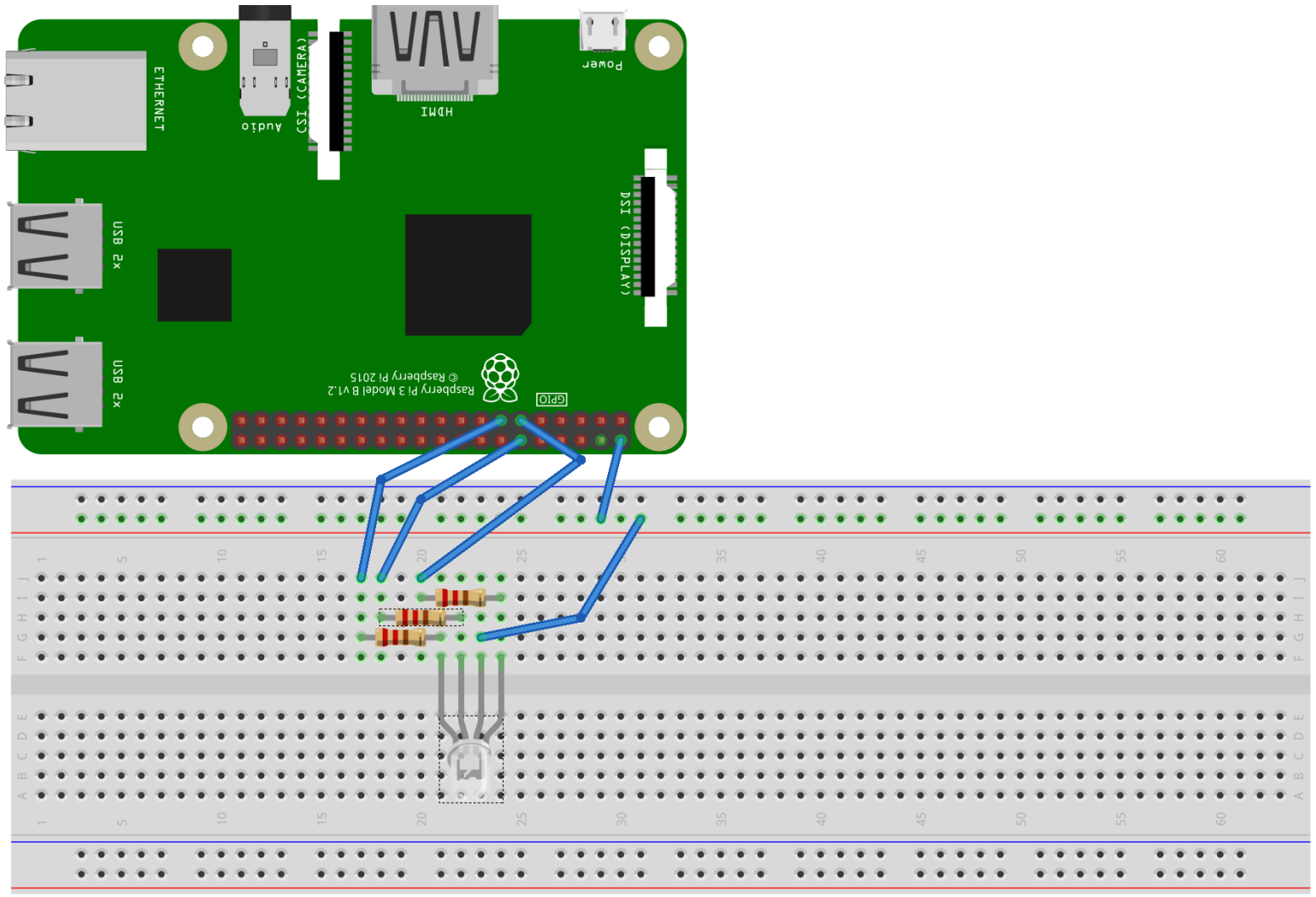
Add debug node, Connect nodes and Deploy



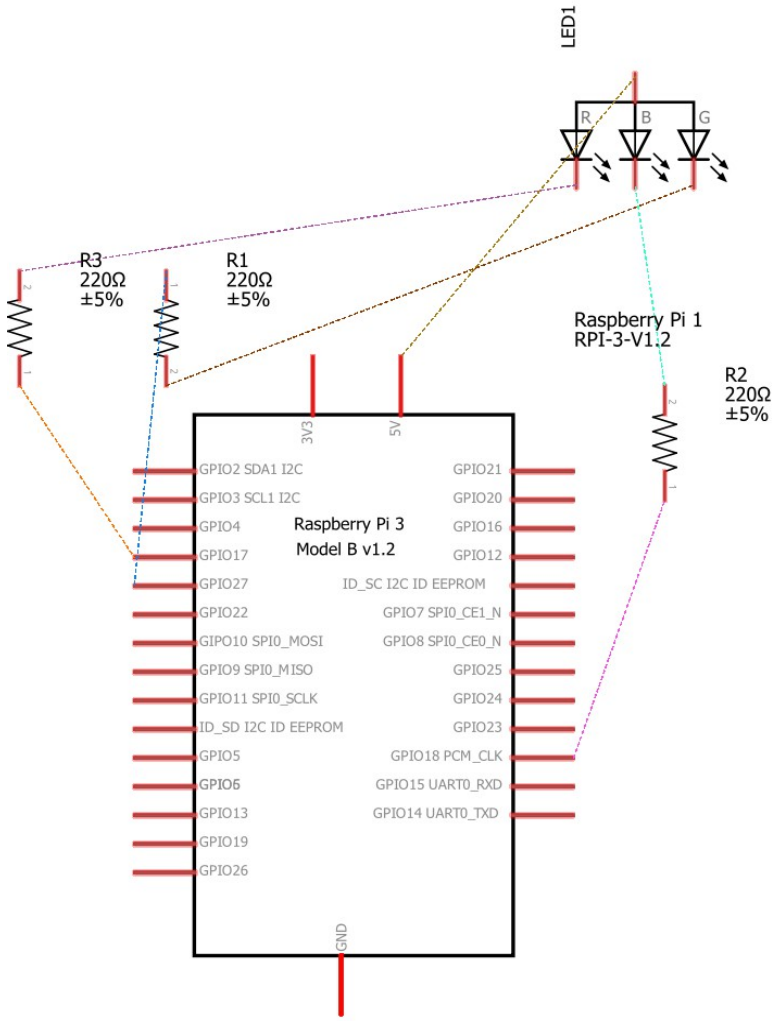
Wire RGB LED and Resistors

- Remove red led
- Add resistors to pins 12 & 13
- Find flat side of RGB LED
- With flat side of RGB LED on left
  - 1st from left to resistor on Pin 11
  - 2nd from left to 5v (this is the longest leg on RGB LED
  - 3rd from left to resistor on Pin 12
  - 4th from left to resistor on Pin 13

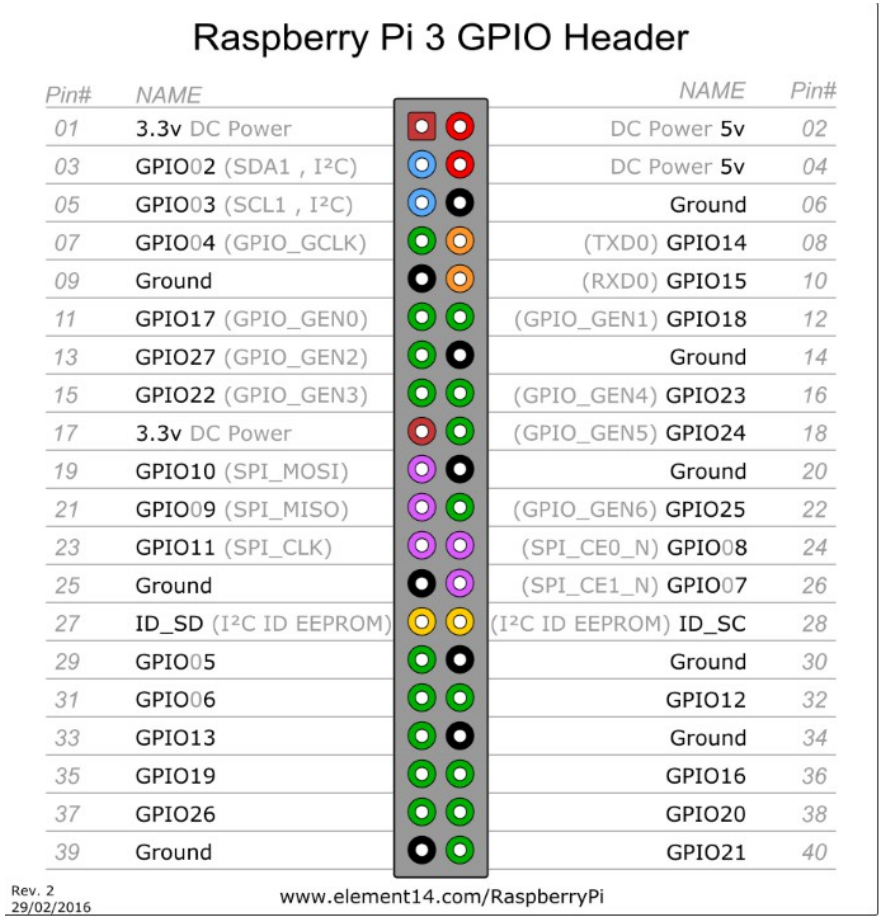
Wiring Picture



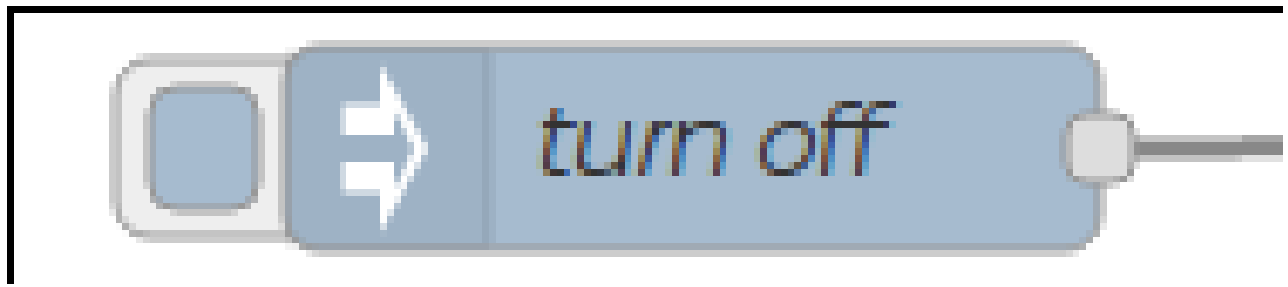
Wiring Schematic



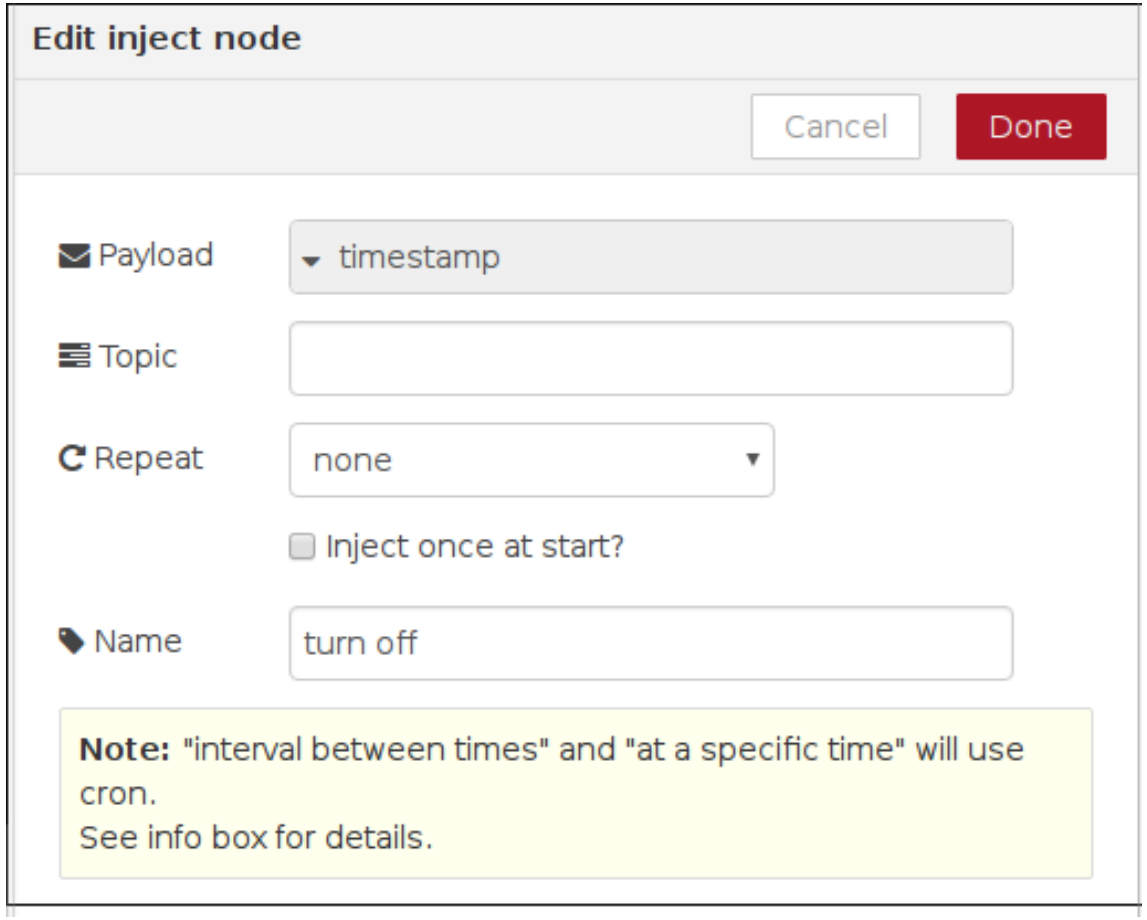
Raspberry Pi Pin Layout



Add inject node

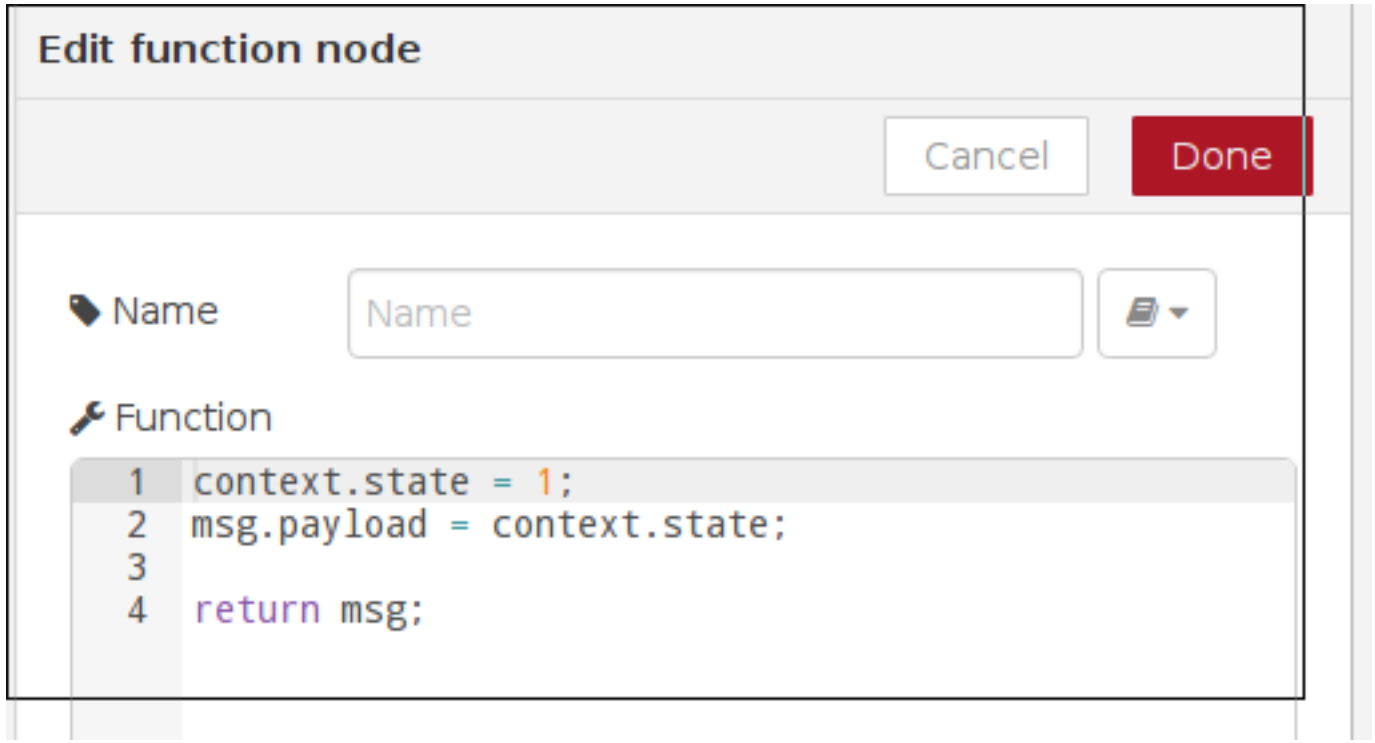


Configure inject node

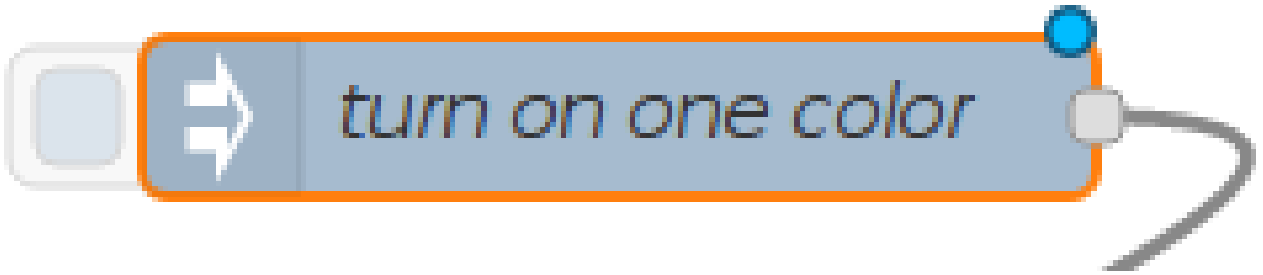


Add function node

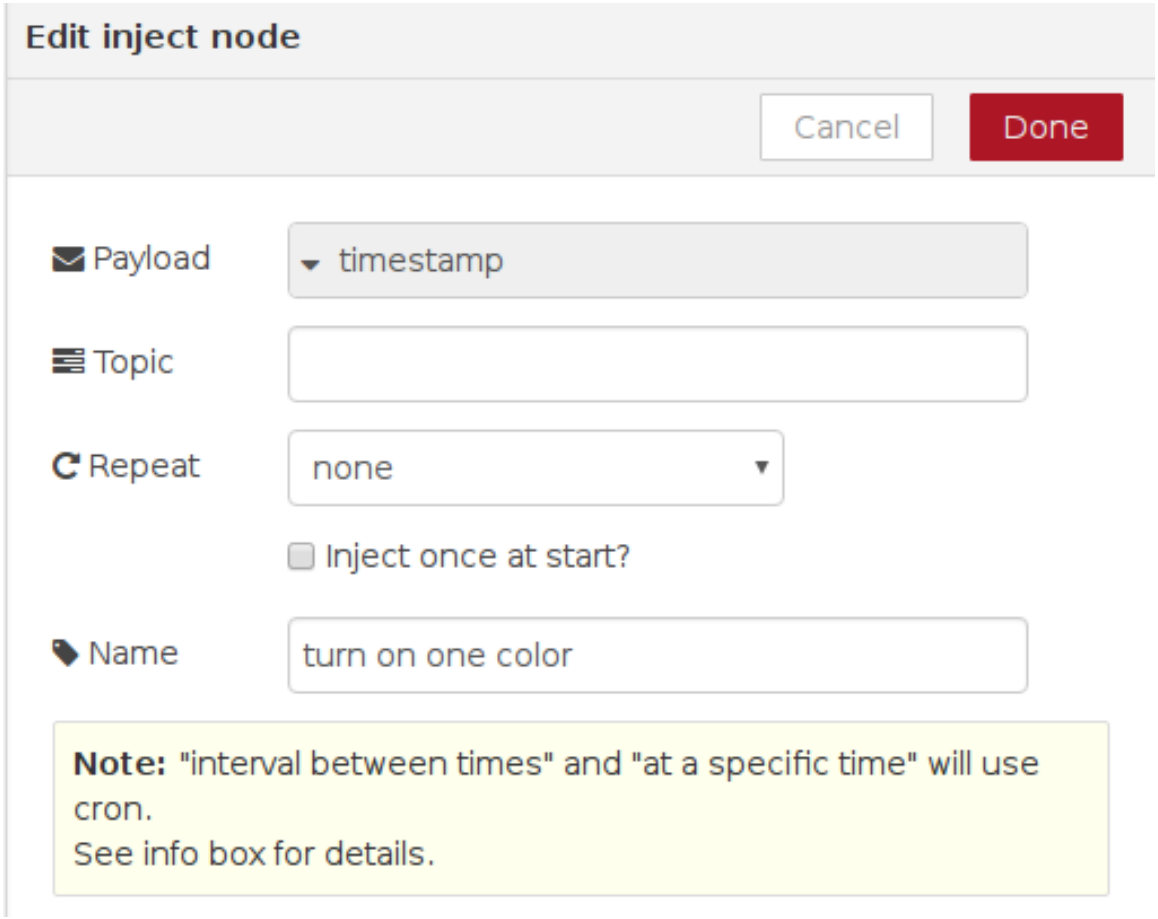
Configure function node – Turn Off



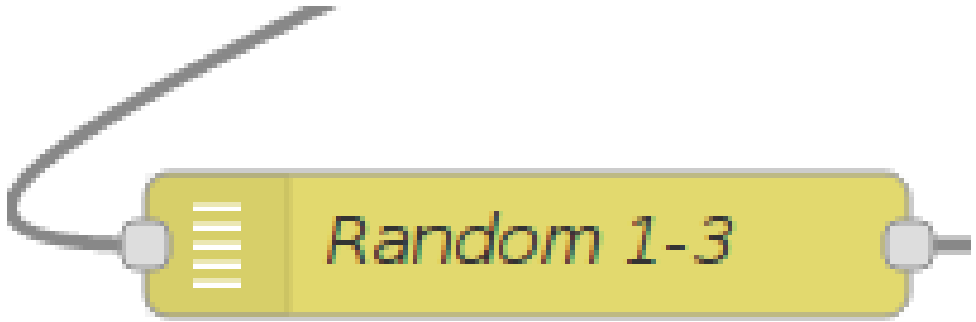
Add inject node



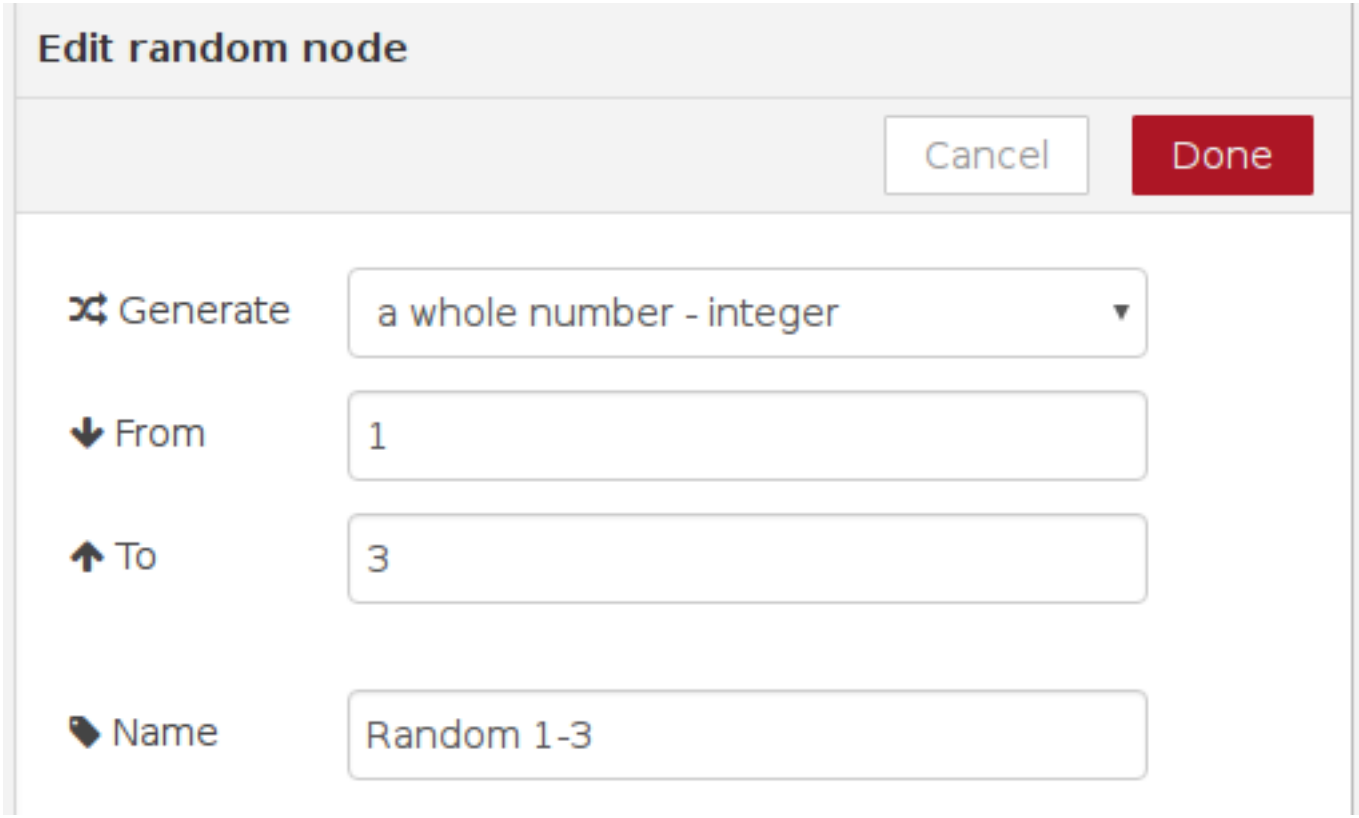
Configure inject node



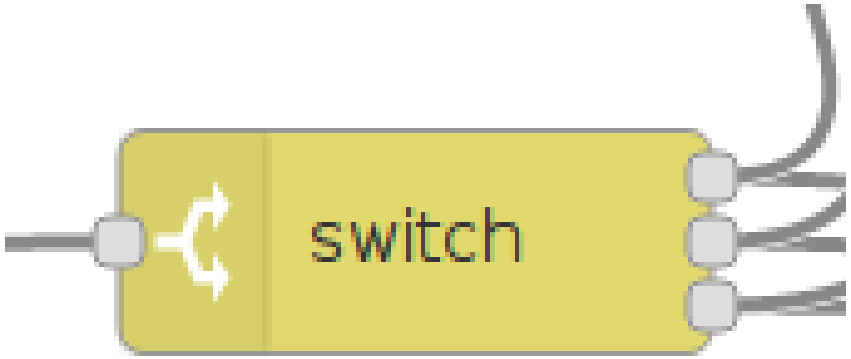
Add random node



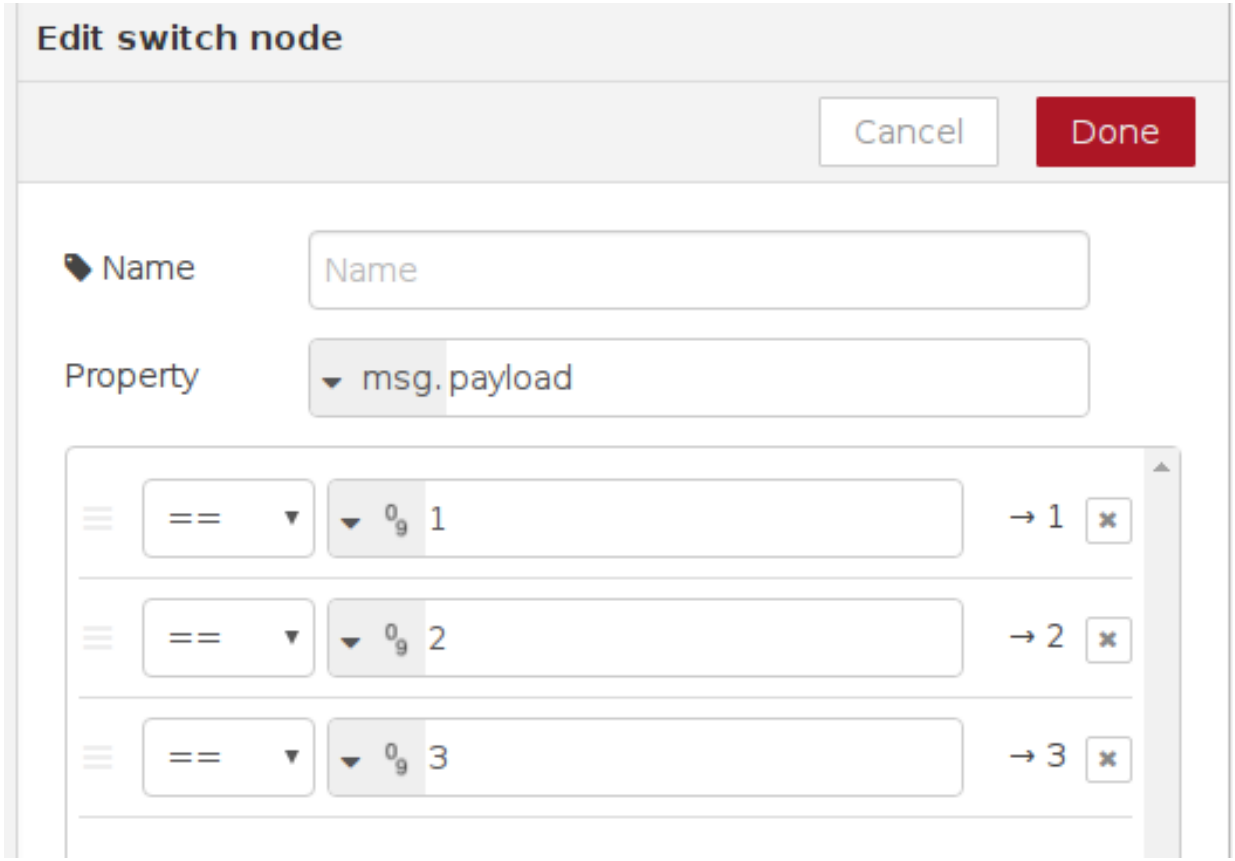
Configure random node



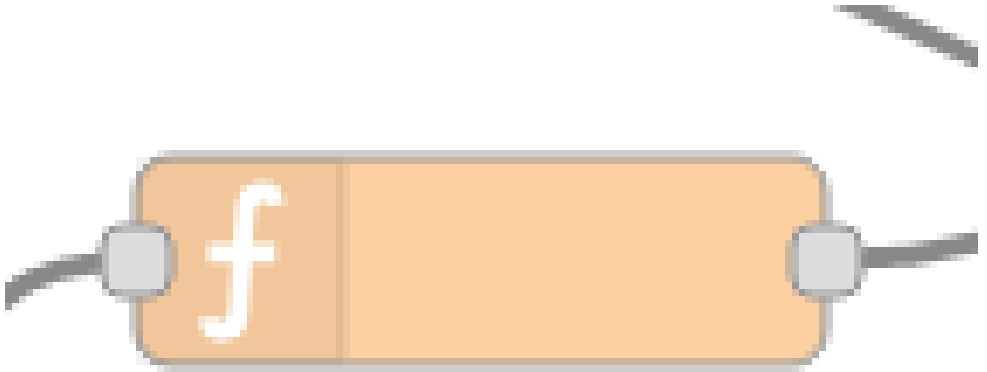
Add switch node



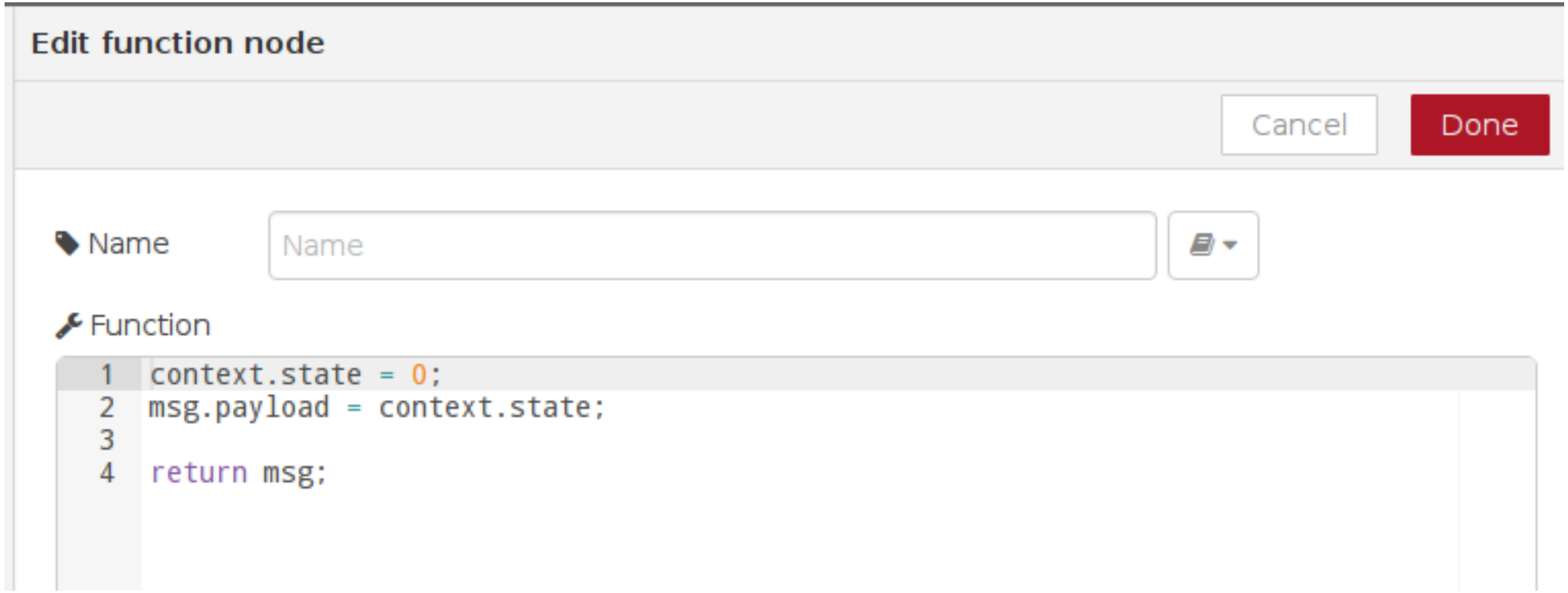
Configure switch node



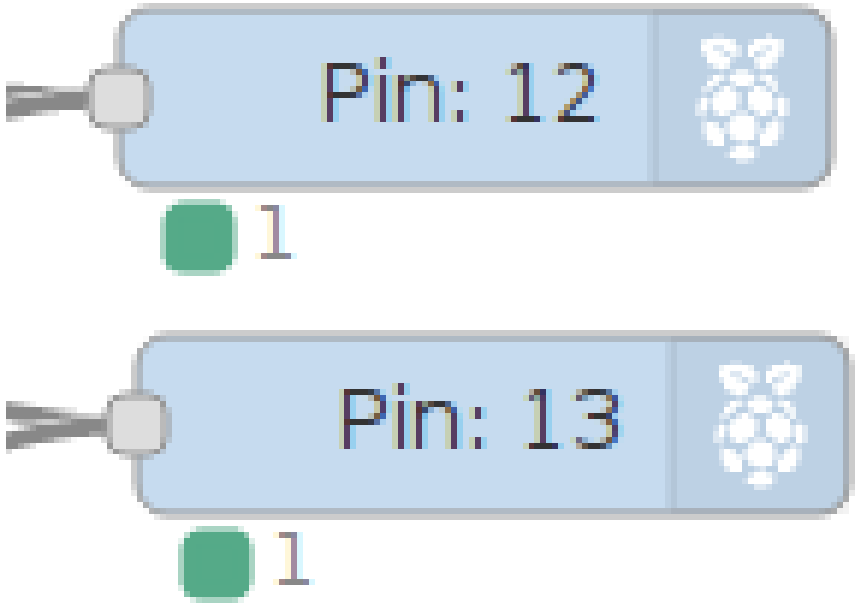
Add 3 function nodes



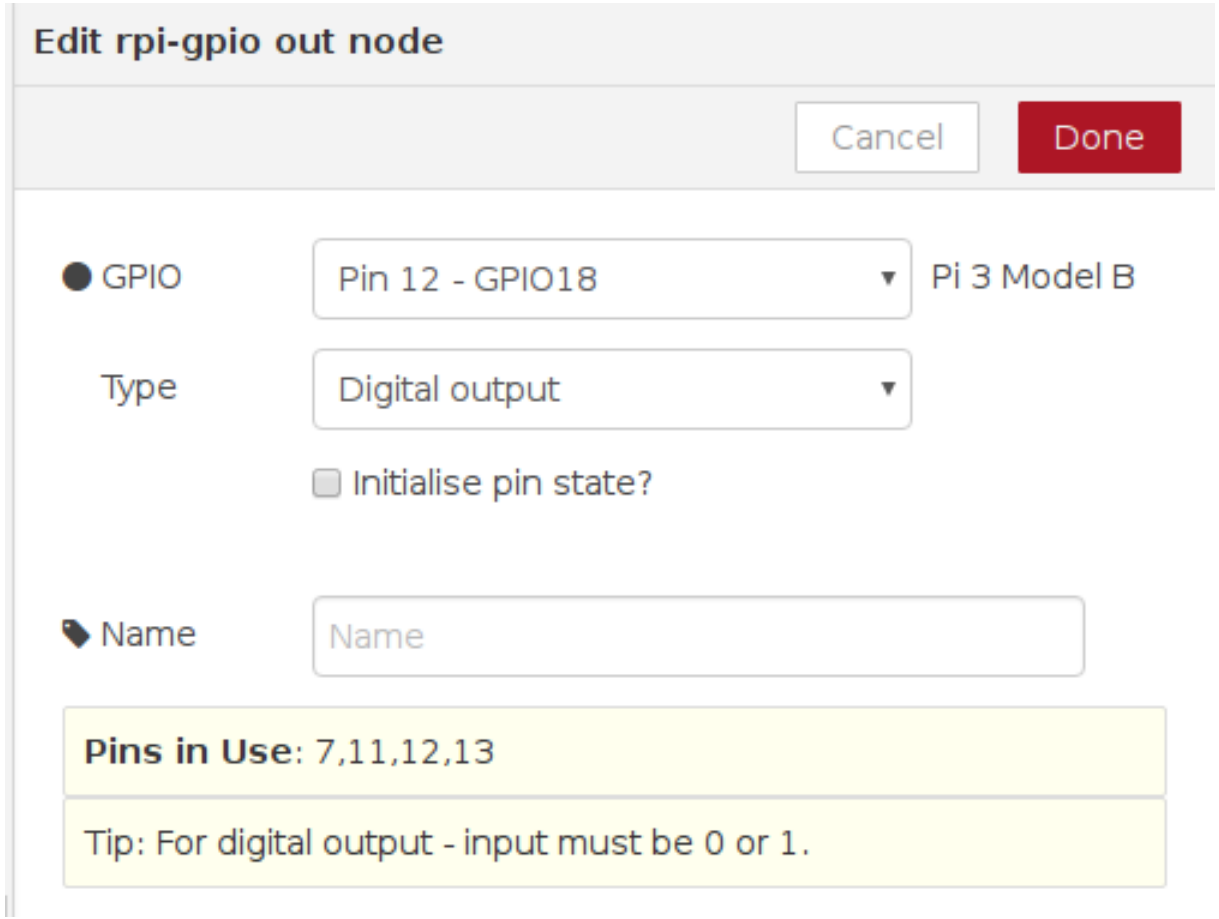
Configure All 3 function nodes the same



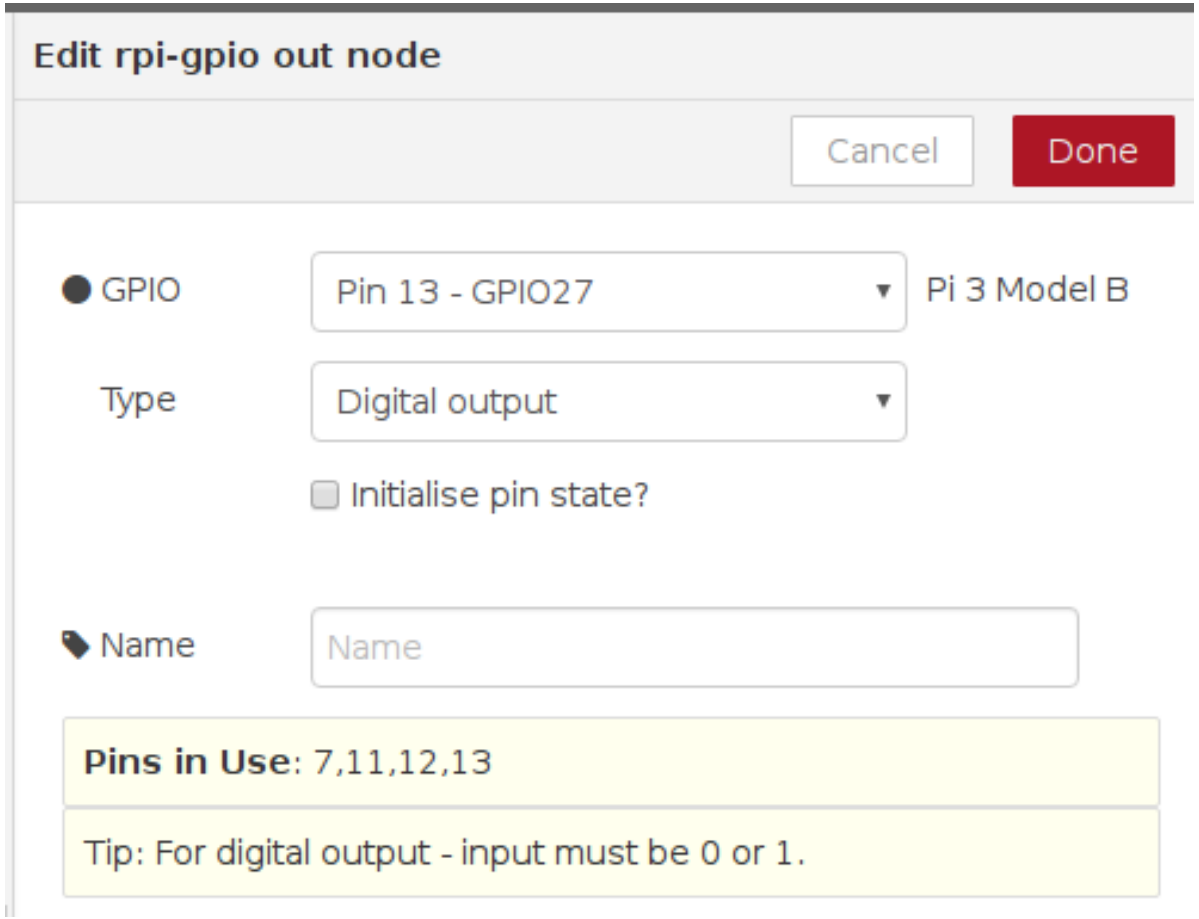
Add 2 more rpi-gpio out node



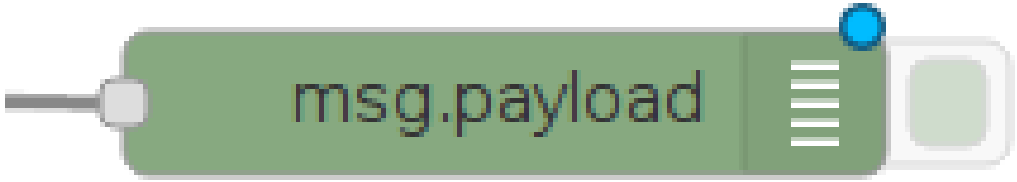
Configure rpi-gpio out node 2



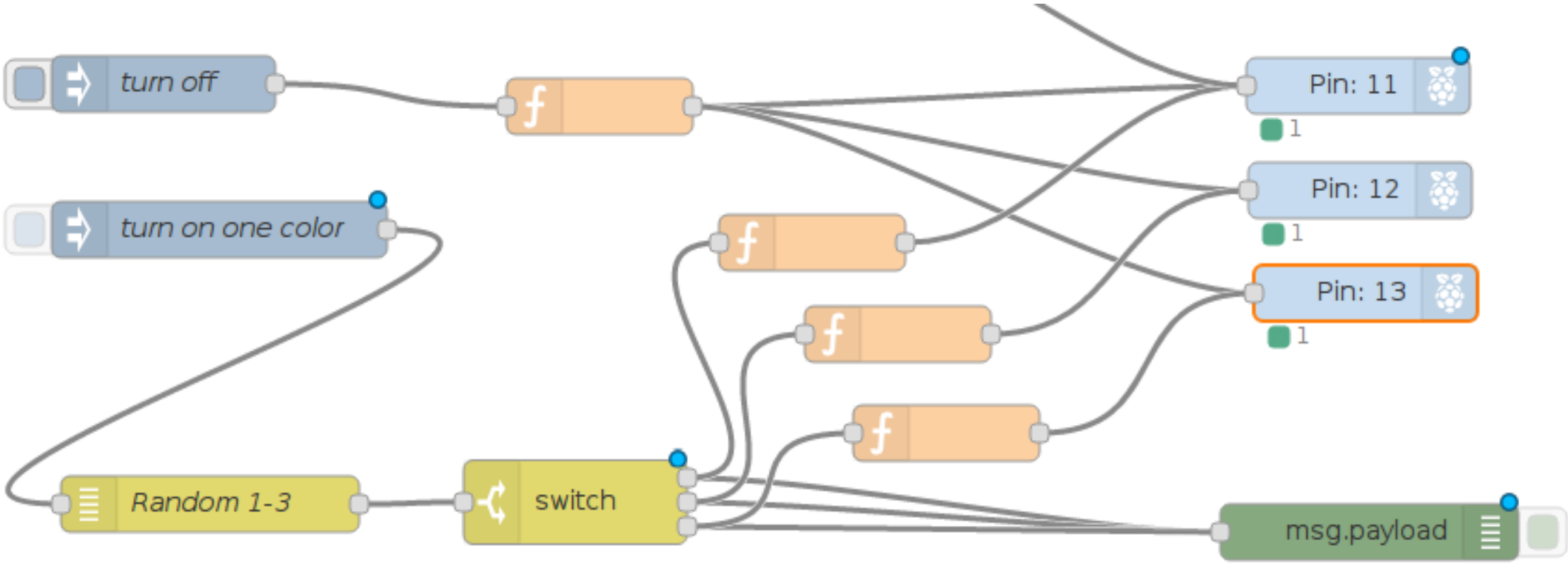
Configure rpi-gpio out node 3



Add debug node



Connect nodes and Deploy



Challenges

- Add additional colors
- Automate color changes