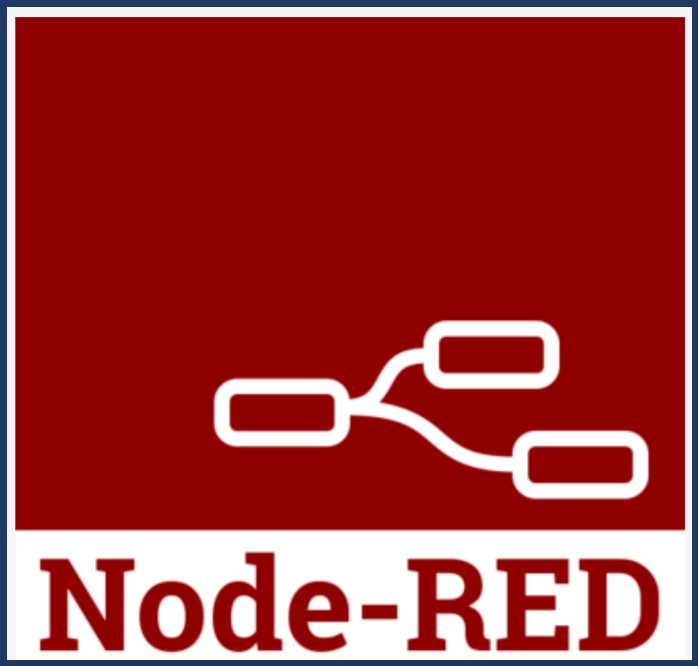


Node-RED: The Basics

APPLICATION INTERFACE CONTROLLER

BTB31103

SEMESTER JAN 2020

Safyzan Salim

V1 JAN 2020 : V2 FEB 2021

Download Node-RED & Install

→ INSTALL Node.js

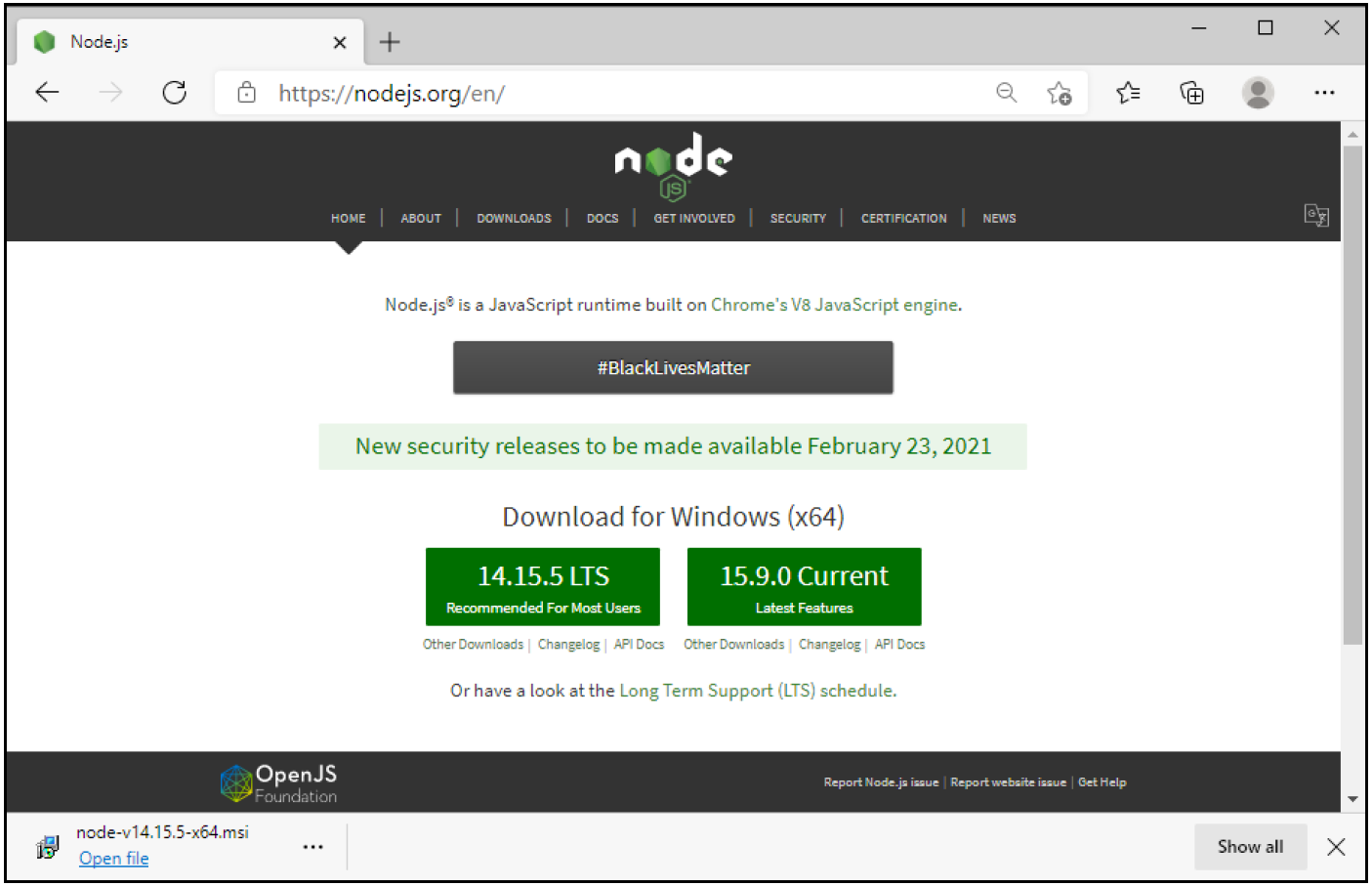
>> Download the latest Long Term Support (LTS) version of Node.js from the official Node.js home page. It will offer you the best version for your system.

>> Run the downloaded MSI file.

>>Installing Node.js requires local administrator rights; if you are not a local administrator, you will be prompted for an administrator password on install.

>> Accept the defaults when installing.

>> After installation completes, close any open command prompts and re-open to ensure new environment variables are picked up.



Ref:https://nodered.org/docs/getting-started/windows

Download Node-RED & Install

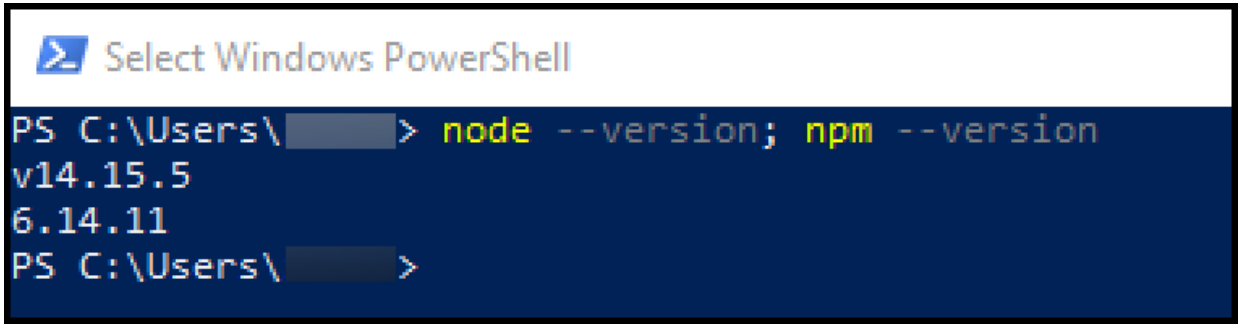
>> Once installed, open a command prompt and run the following command to ensure Node.js and npm are installed correctly.

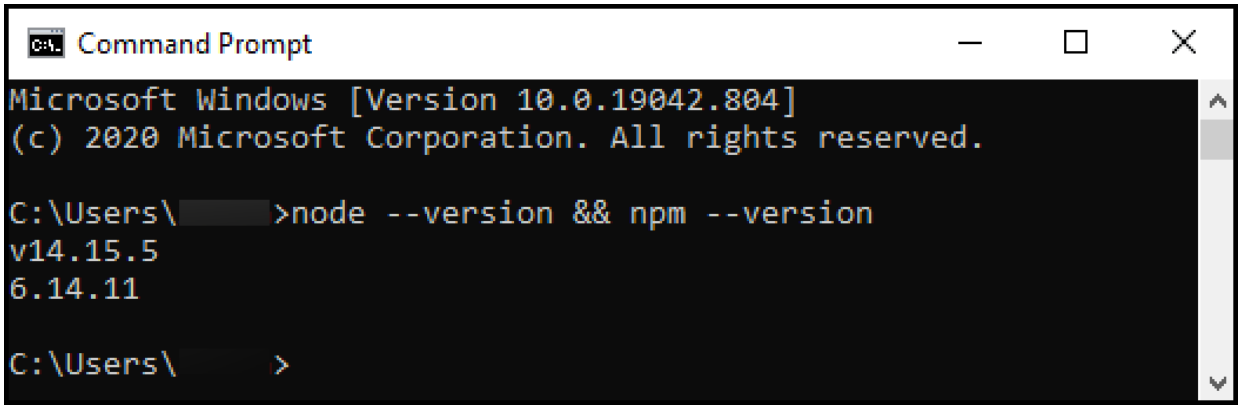
→Using Powershell & macOS terminal:

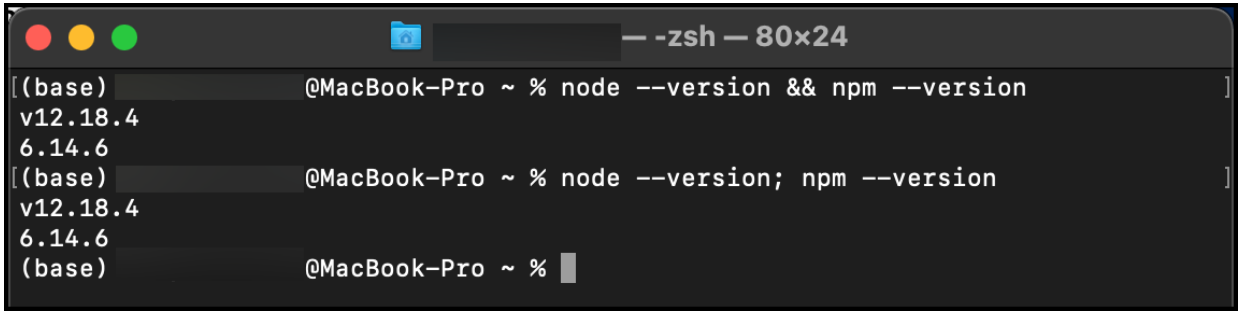
node --version; npm -version

→Using cmd & macOS terminal:

node --version && npm --version





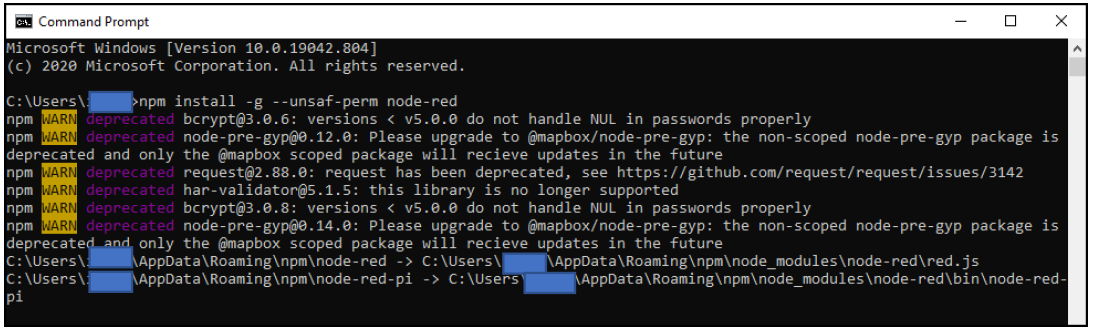


Download Node-RED & Install

INSTALL Node-RED

>> Installing Node-RED as a global module adds the command node-red to your system path. Execute the following at the command prompt or terminal :

npm install -g --unsafe-perm node-red



RUNNING AS A SERVICE

>> Once installed, you are ready to run Node-RED by executing the following syntax at command prompt or terminal:

→Windows OS:

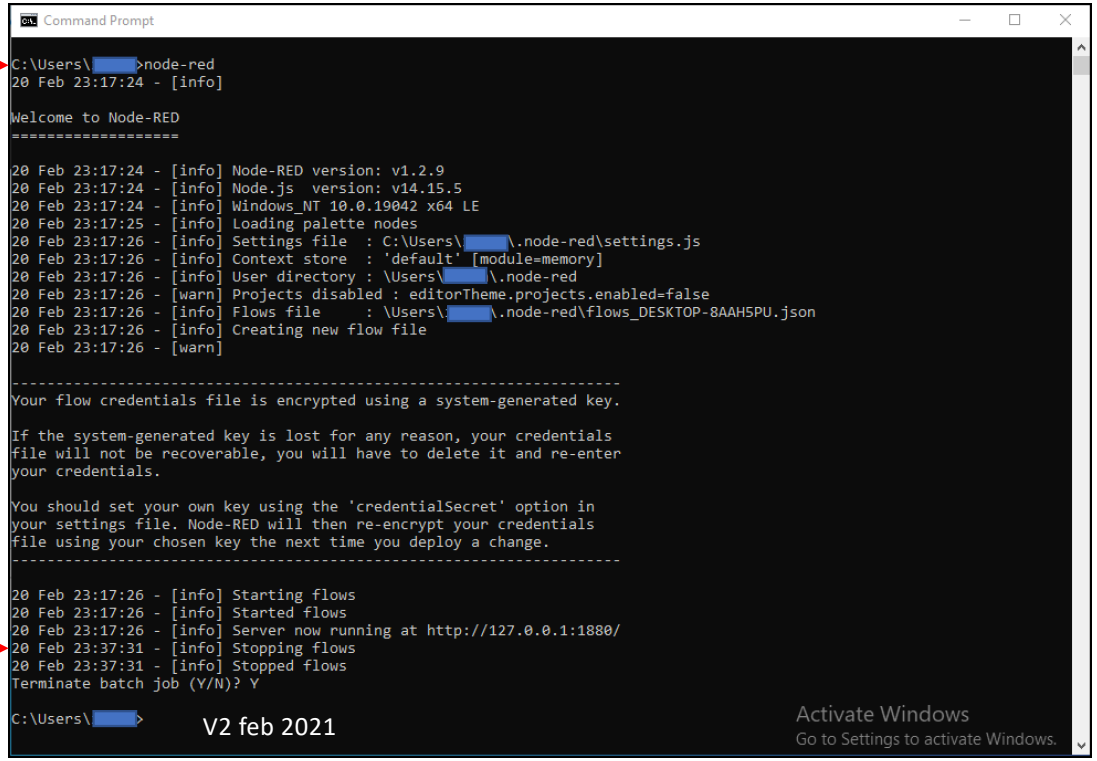
node-red

→Other OS:

node-red-start

>> To stop the service:

press CTRL C



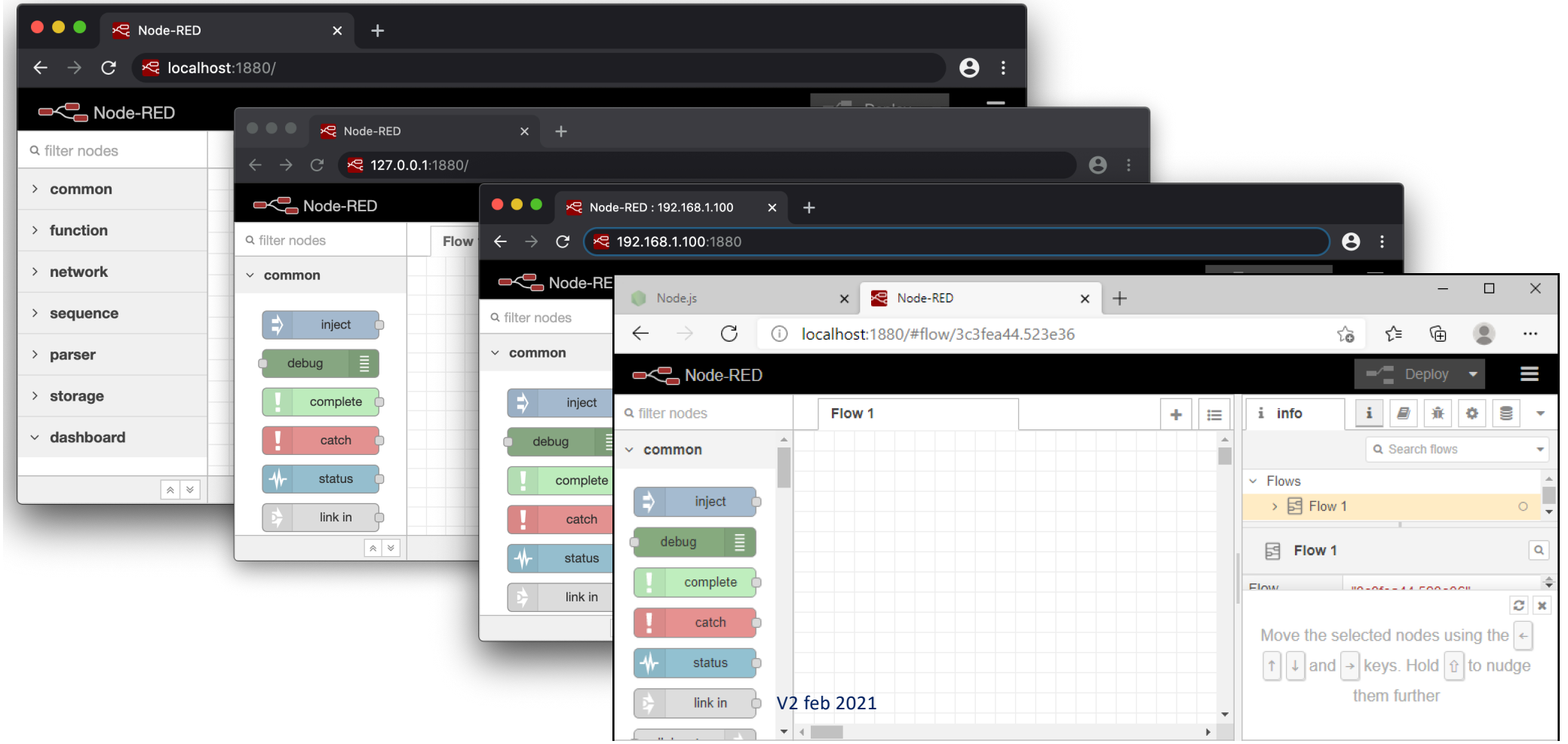
V2 feb 2021

Activate Windows
Go to Settings to activate Windows.

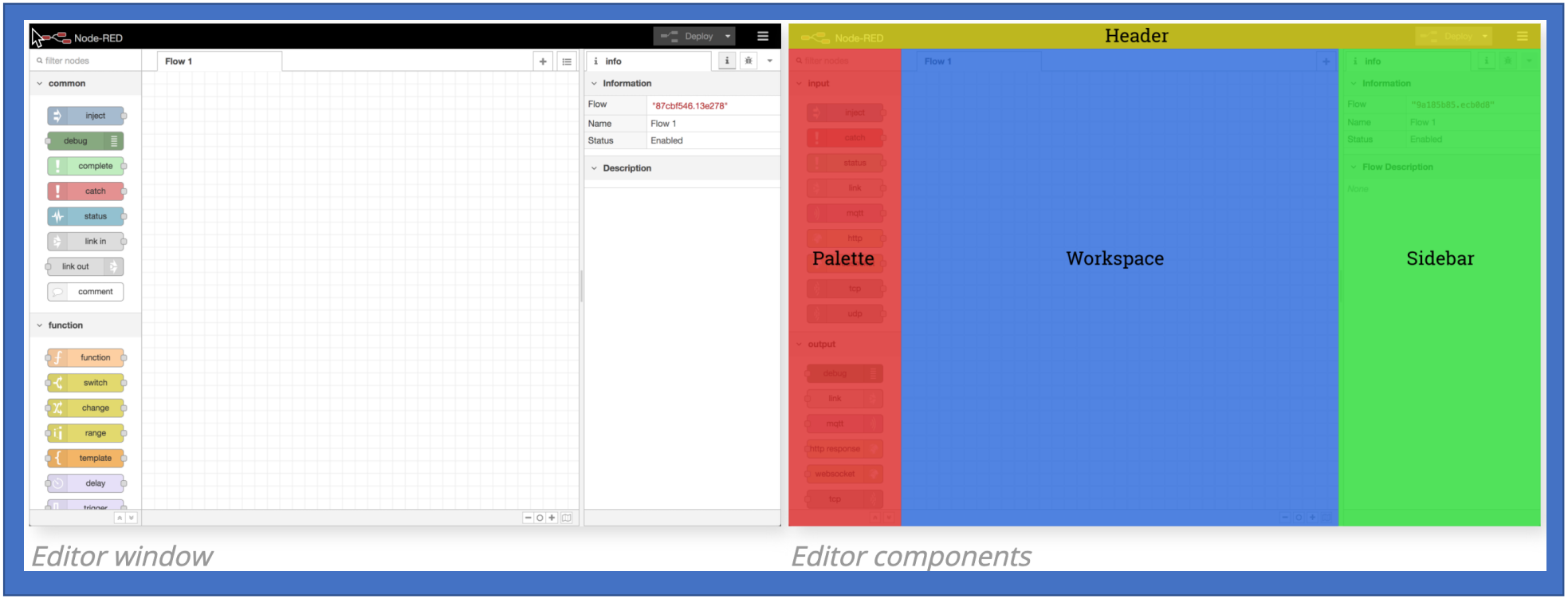
Download Node-RED & Install

OPENING THE EDITOR

>> You can then access the Node-RED editor by pointing your browser at http://localhost:1880.

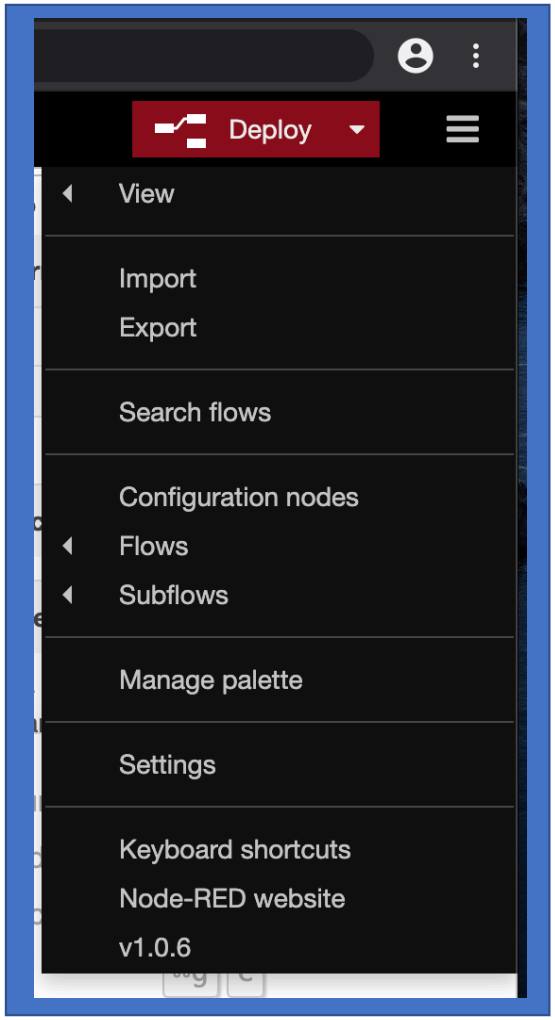


The editor components.



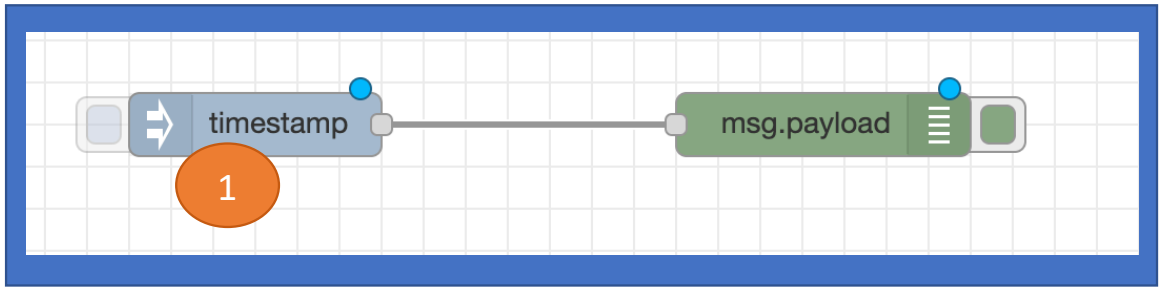
Editor window *Editor components*

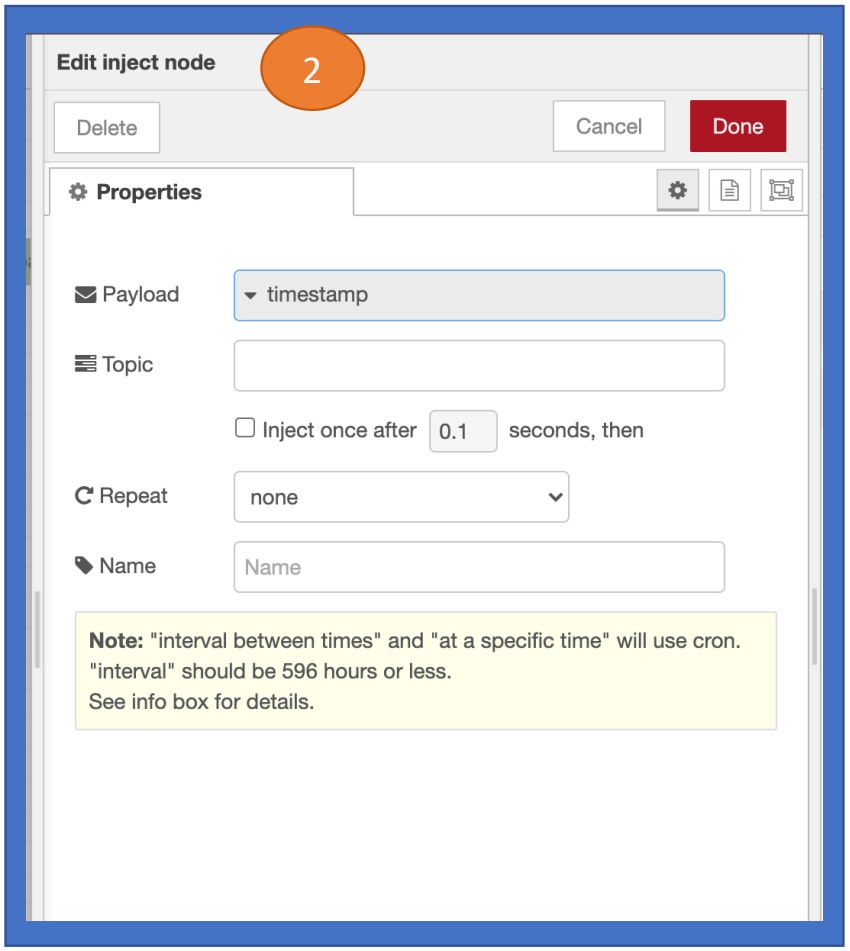
Node-RED: The Menu



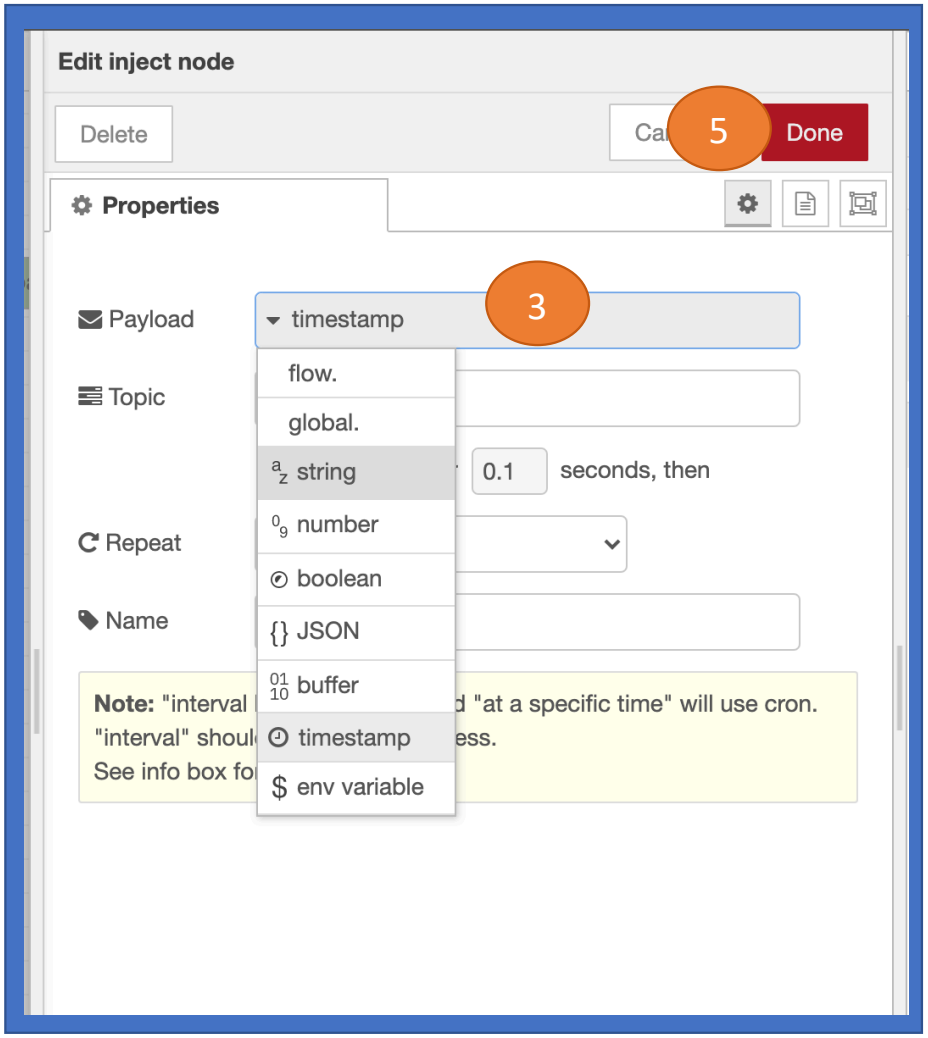
i. Display your name when the inject node is click.

1. Place *Inject* node and *Debug* node into workspace.
2. Double click the *Inject* node to change the properties.



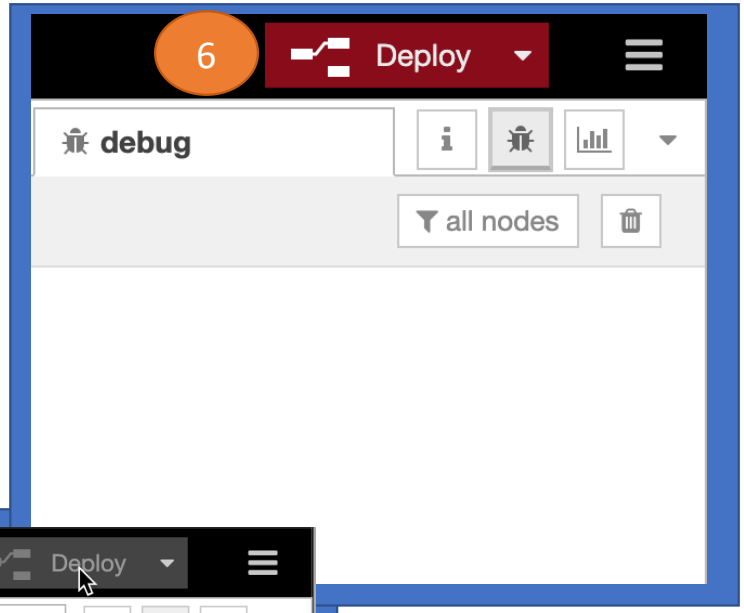


EXERCISE 1: Sending Information over NodeRED

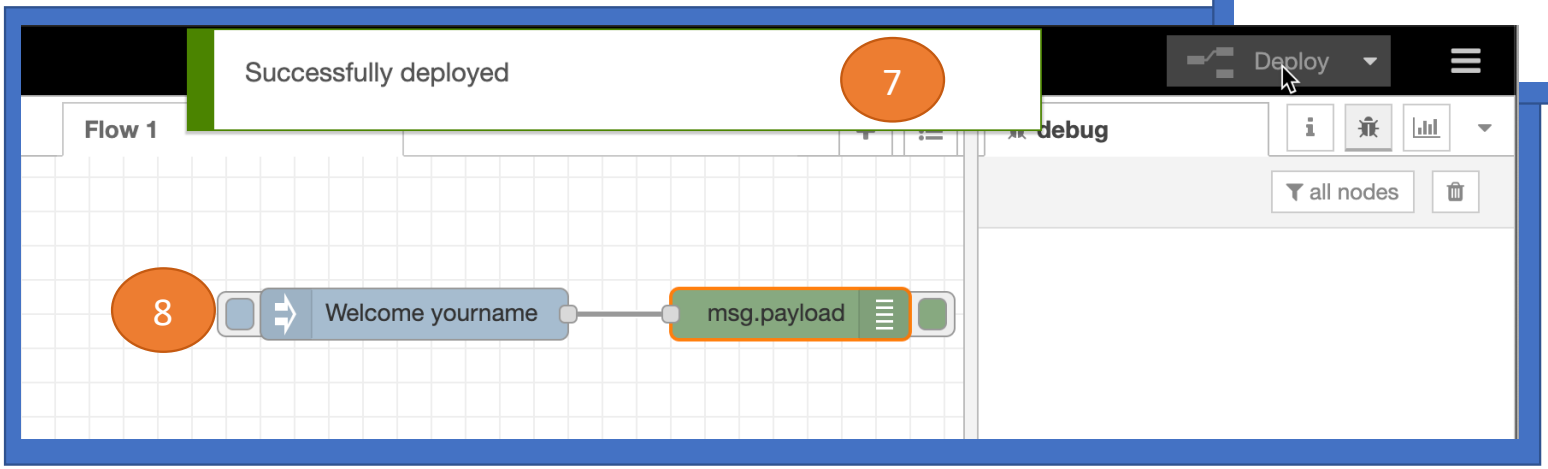


3. Click at the *Payload* dropdown box and choose *string*.
4. Type ***Welcome 'yourname'*** .
5. Click *Done*.

6. Click *Deploy* to update, save and enable execute. It becomes red when you make any changes.

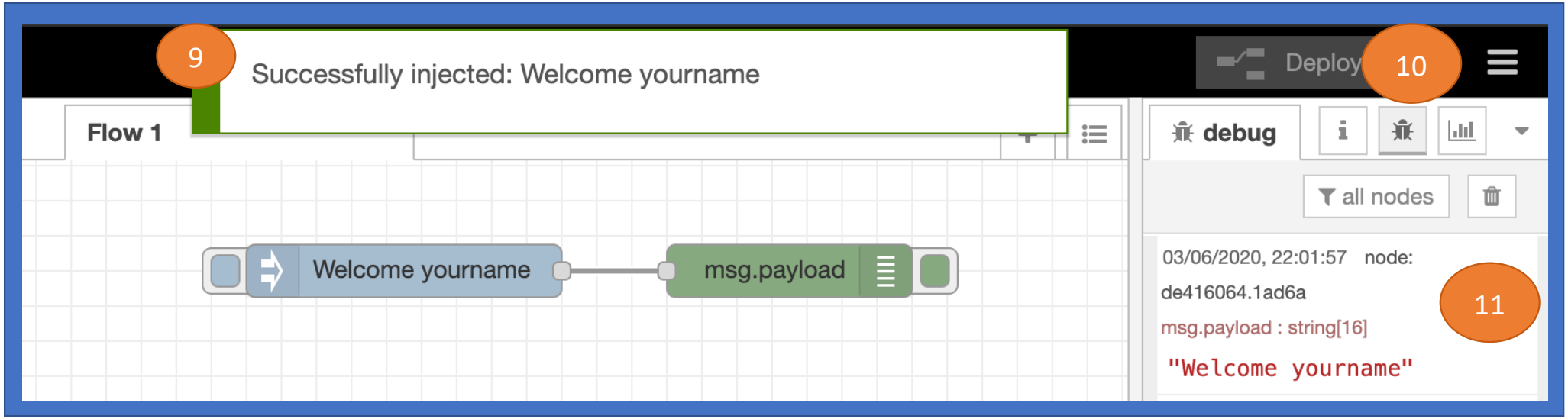


7. Success message box appears right after click *Deploy*.



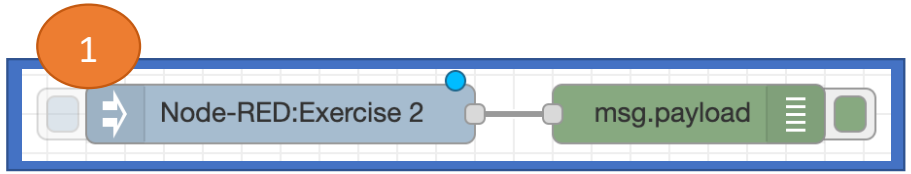
8. Click to small blue square to trigger the output.

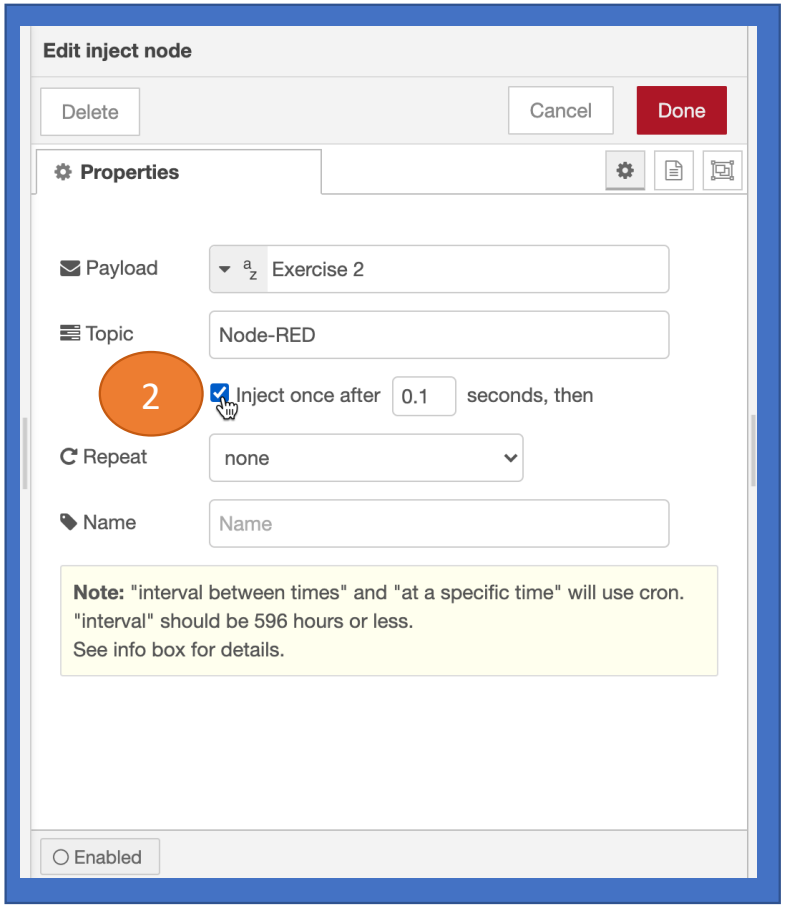
9. A successful injected message will pop-up immediate you click inject node.
10. Click the bug icon to view the output via debug activity.
11. The output.



ii. Change inject mode

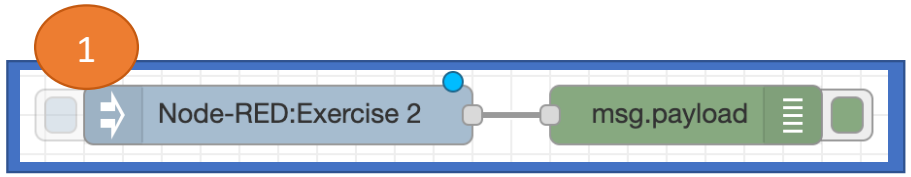
1. Set *Inject* node and *Debug* node as follows.
2. Click *Inject once after 0.1 seconds, then…*
3. Click *Done*.
4. Click *Deploy*.
5. Click *Debug* window.
6. Observe the output.

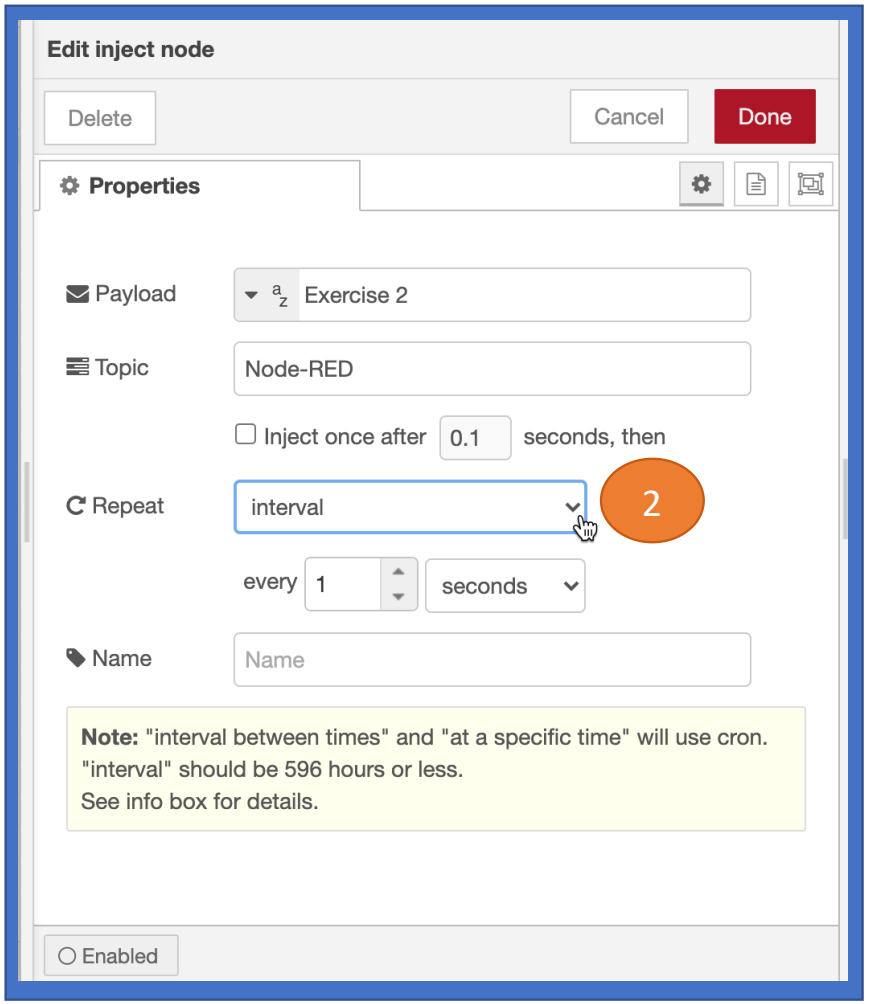




iii. Change inject mode

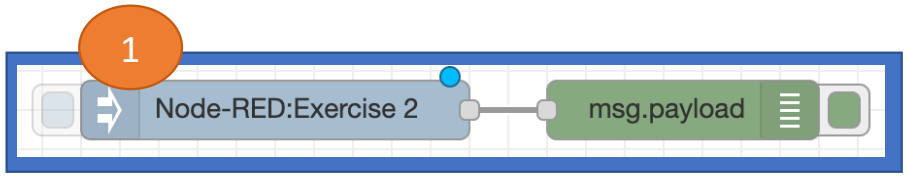
1. Set *Inject* node and *Debug* node as follows.
2. *Set Repeat > interval > every 1 > seconds*.
3. Click *Done*.
4. Click *Deploy*.
5. Click *Debug* window.
6. Observe the output.

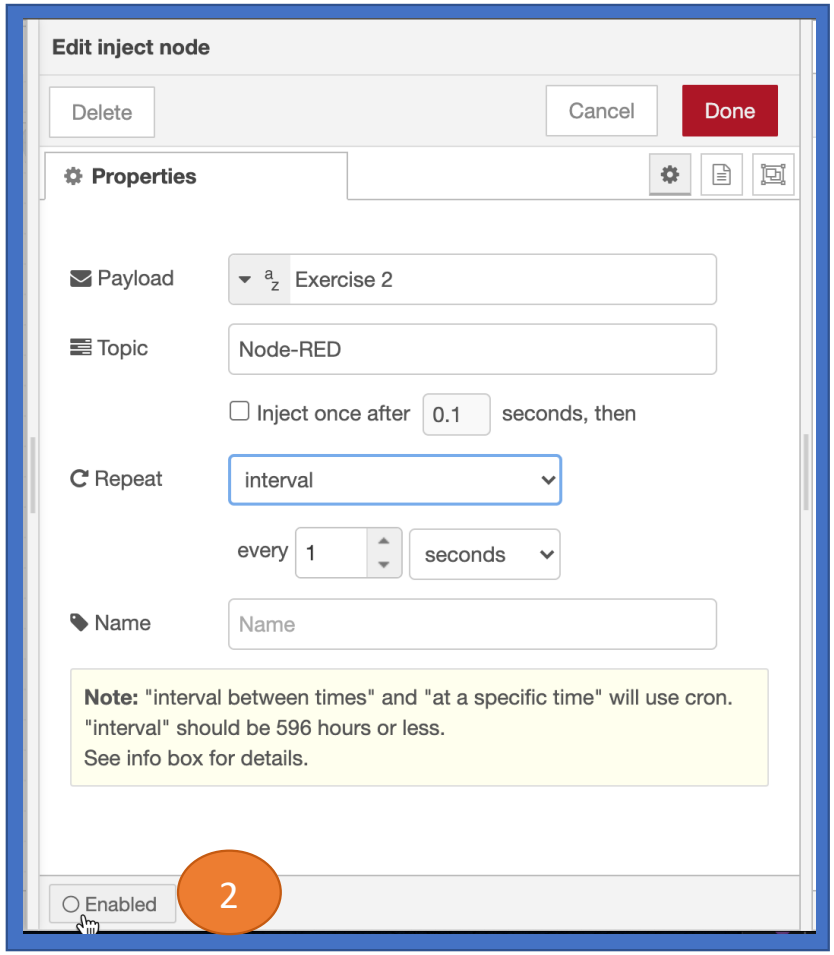




iv. Enabled vs Disabled mode

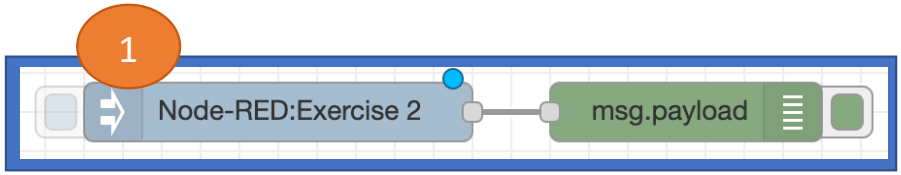
1. Set *Inject* node and *Debug* node as follows.
2. Click *Enabled* radio button.
3. Report the results.

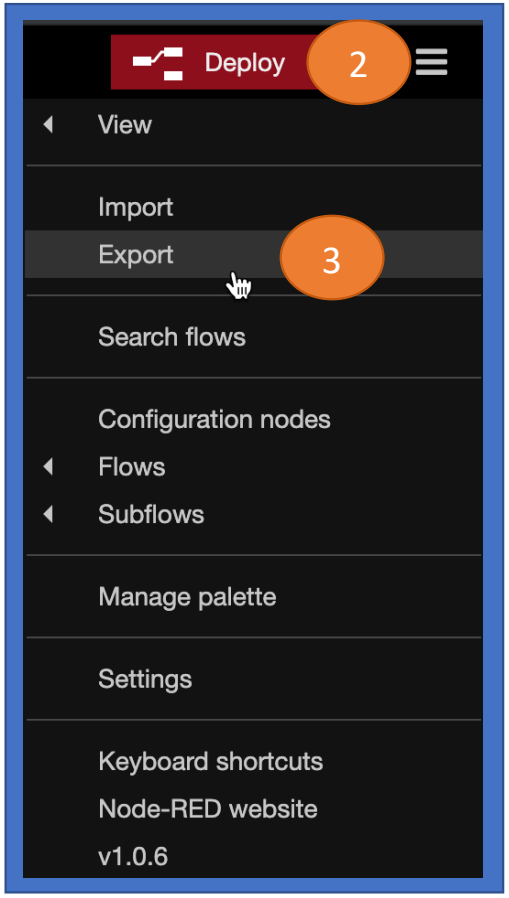




v. Exporting your works

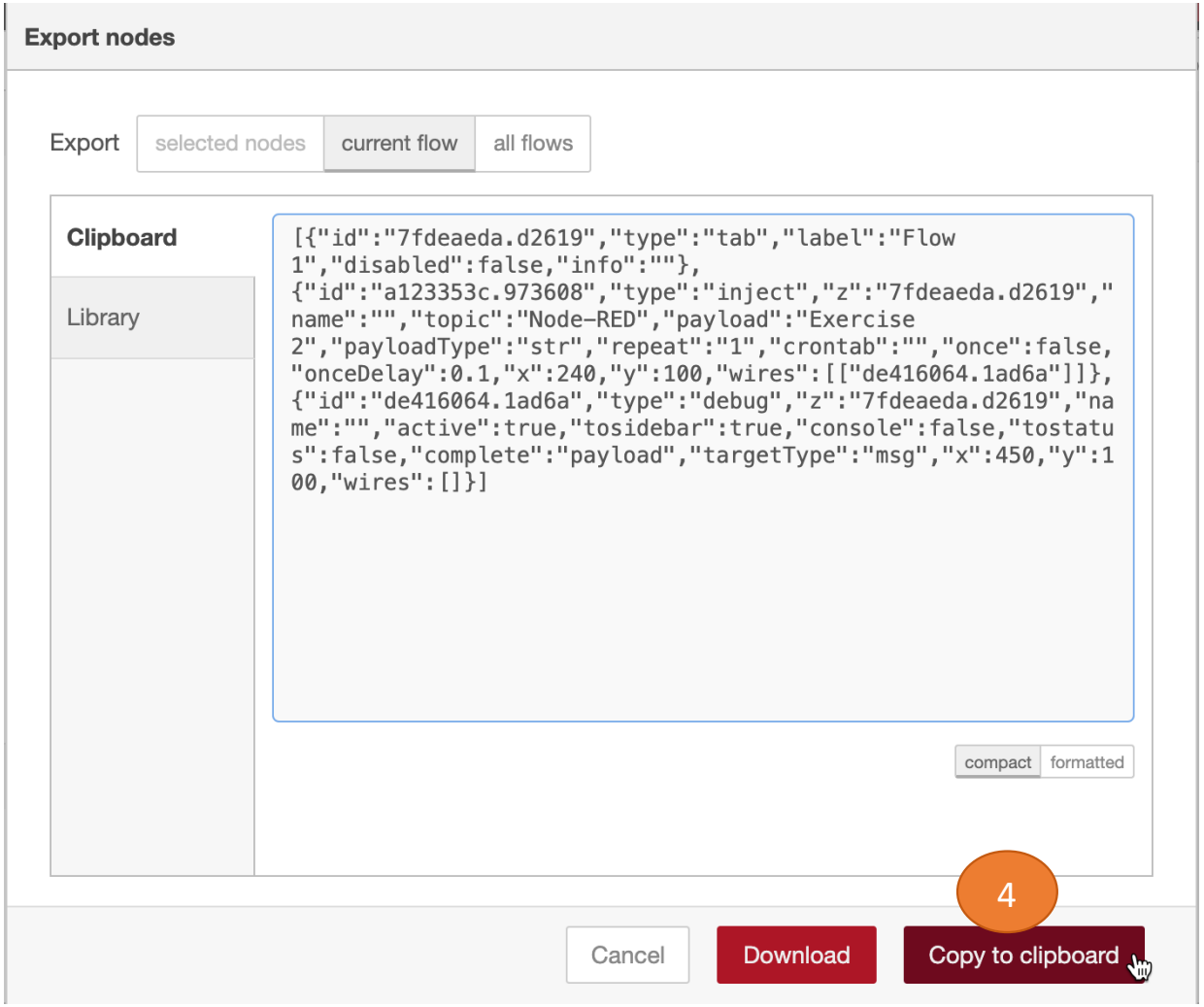
1. Set *Inject* node and *Debug* node as follows.
2. Click *Menu*.
3. Click *Export*.





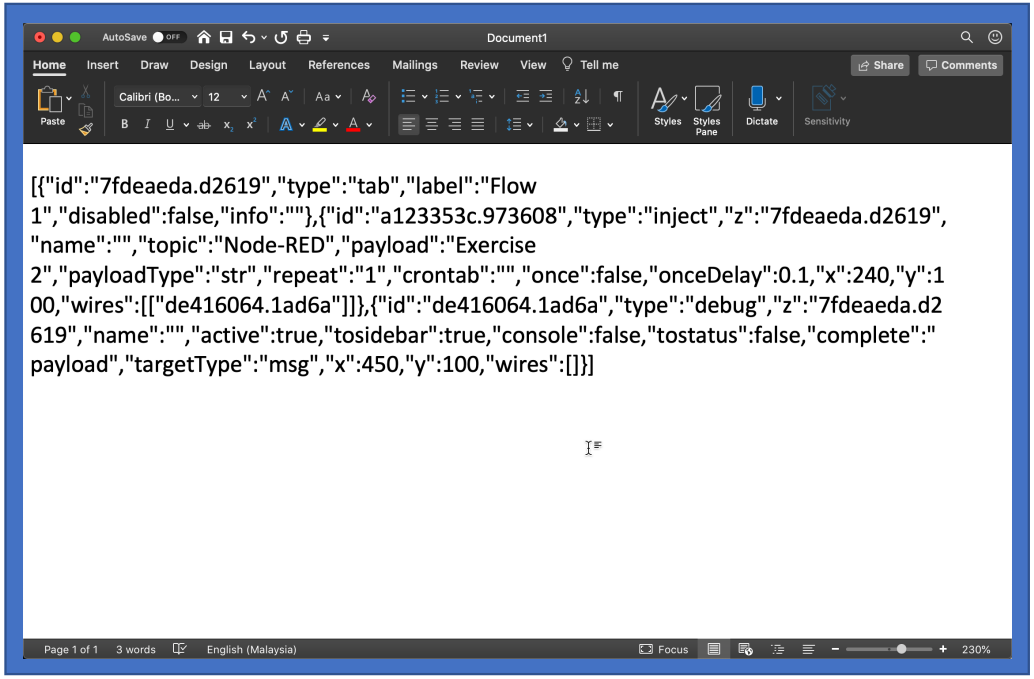
v. Exporting your works

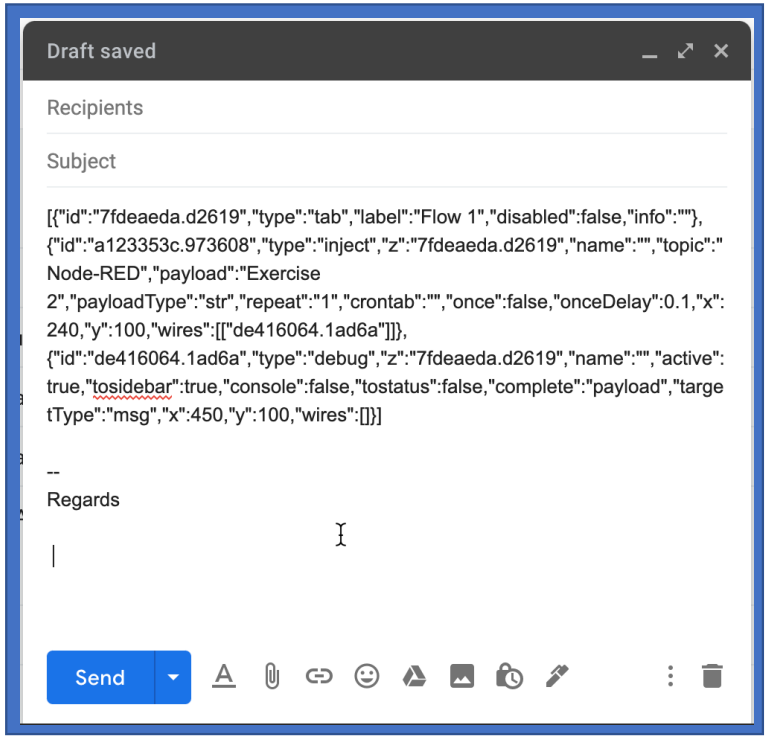
4. Click *Copy to clipboard*.
Click *Download* if you wish to download the nodes and it will be saved into your laptop/hard disk with the name of *flows.json*.



v. Exporting your works

6. Open any text editor, email and paste work.





QUESTIONS

END