

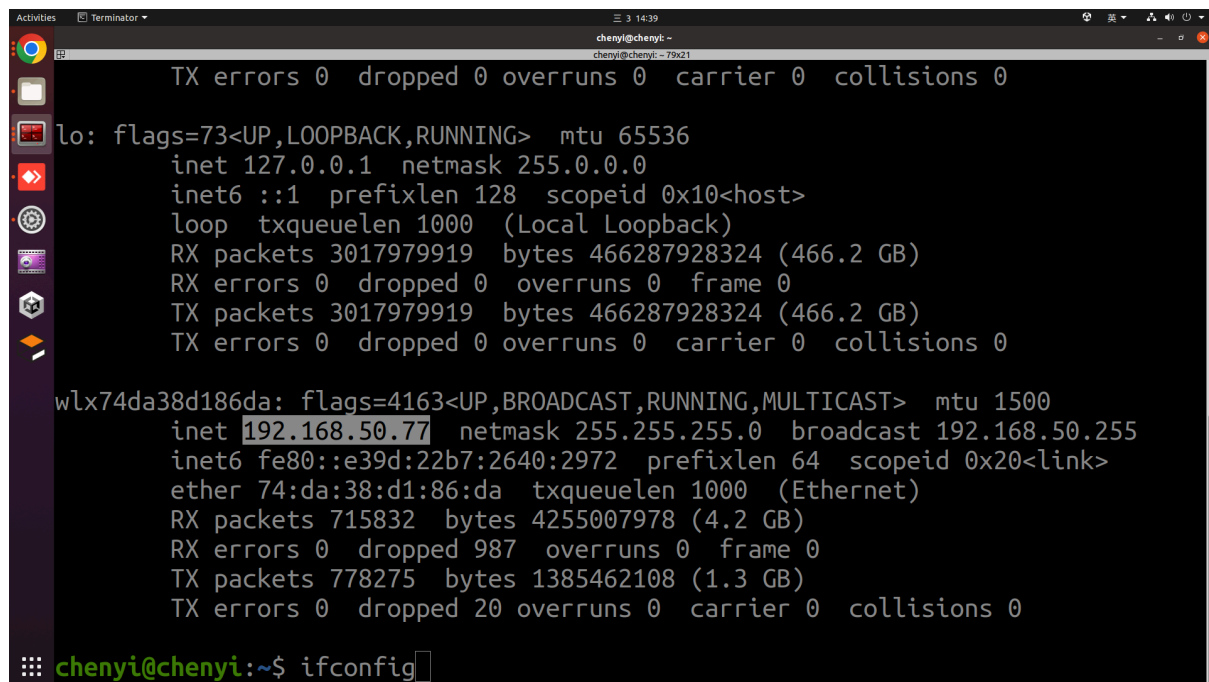
## 任務一

連接EE635的wifi, 使用ifconfig指令列出自己的ip, 找到192.168.50.XX開頭的ip  
記住你的ip

ifconfig指令不能用解法:

```
sudo apt update
sudo apt install net-tools
ifconfig
```

<https://phoenixnap.com/kb/ifconfig-command-not-found>



```
TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0
lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
    inet 127.0.0.1  netmask 255.0.0.0
    inet6 ::1  prefixlen 128  scopeid 0x10<host>
    loop  txqueuelen 1000  (Local Loopback)
    RX packets 3017979919  bytes 466287928324 (466.2 GB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 3017979919  bytes 466287928324 (466.2 GB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

wlx74da38d186da: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 192.168.50.77  netmask 255.255.255.0  broadcast 192.168.50.255
    inet6 fe80::e39d:22b7:2640:2972  prefixlen 64  scopeid 0x20<link>
    ether 74:da:38:d1:86:da  txqueuelen 1000  (Ethernet)
    RX packets 715832  bytes 4255007978 (4.2 GB)
    RX errors 0  dropped 987  overruns 0  frame 0
    TX packets 778275  bytes 1385462108 (1.3 GB)
    TX errors 0  dropped 20  overruns 0  carrier 0  collisions 0

chenyi@chenyi:~$ ifconfig
```

## 任務二

現在, 嘗試使用ssh指令連接到同組組員的電腦  
組長連到組員, 再退出, 再由組員連到組長

ssh安裝與教學

```
sudo apt install openssh-server
```

<https://magiclen.org/linux-ssh/>

```
Activities Terminator 三 3 15:10
chenyi@chenyi:~
chenyi@chenyi:~ 10x25
ezra@ezra-X550VX:~$ ssh chenyi@192.168.50.77
The authenticity of host '192.168.50.77 (192.168.50.77)' can't be established.
ECDSA key fingerprint is SHA256:tsBqEjGXi6ZZ2Y/M8ozosagJYcjS7yuxZzkHkt9rbXU.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.50.77' (ECDSA) to the list of known hosts.
chenyi@192.168.50.77's password:
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-58-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

129 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Your Hardware Enablement Stack (HWE) is supported until April 2025.
*** System restart required ***

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

chenyi@chenyi:~$
```

### 任務三

現在是組員連到組長電腦，雙方都在terminal打byobu開啟byobu界面，這時你會發現雙方的動作是同步的，一起熟悉byobu指令

#### byobu教學

```
sudo apt-get install byobu
```

[https://blog.csdn.net/qg\\_42948513/article/details/105500097](https://blog.csdn.net/qg_42948513/article/details/105500097)

```
Activities Terminator 三 3 16:17
chenyi@chenyi (140.113.148.77) - byobu
chenyi@chenyi (140.113.148.77) - byobu 79x21
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-58-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

129 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

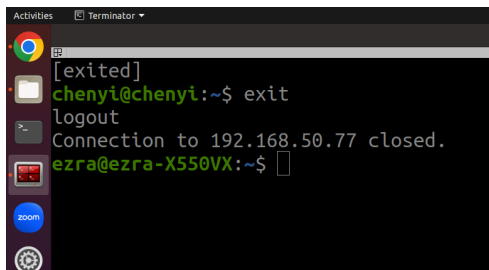
Your Hardware Enablement Stack (HWE) is supported until April 2025.
*** System restart required ***
chenyi@chenyi:~$
```

u 20.04 0:-\* 129! 31d22h 0.29 12x3.7GHz 31.2G15% 234G87% 2023-03-03 16:17:29

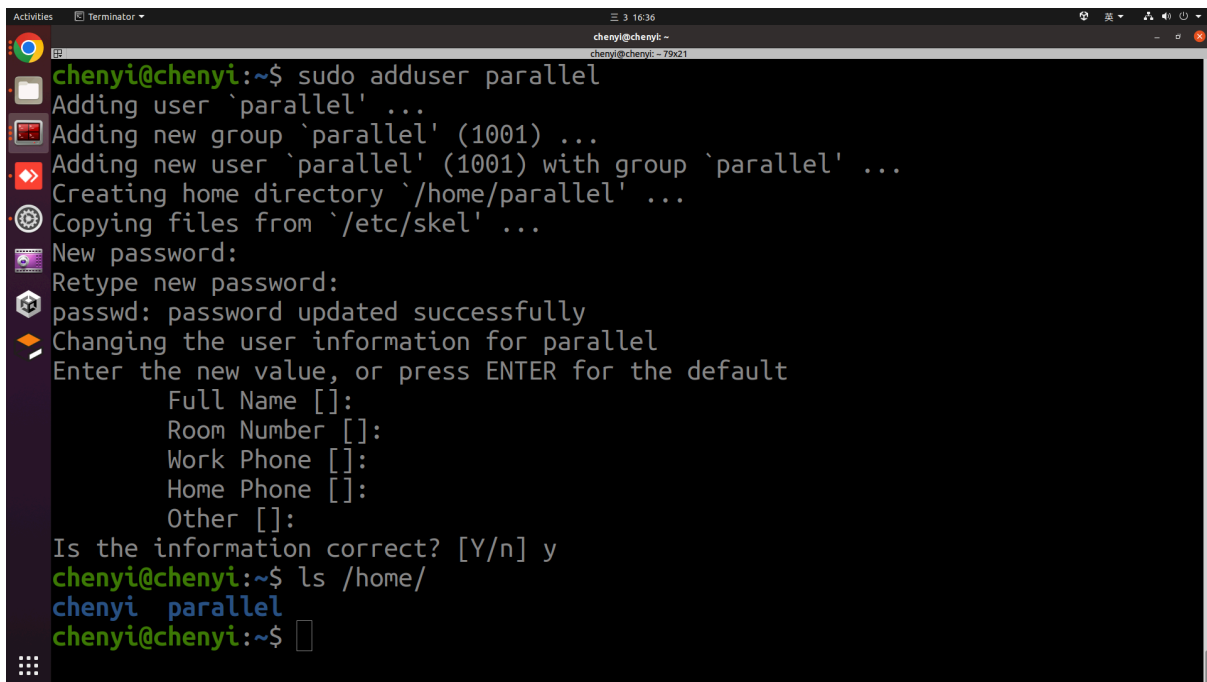
### 任務四

現在組長組員都使用exit退出byobu, 組員多一次exit離開組長電腦, 組長使用sudo adduser新增一個電腦使用者, 使用者名稱為parallel, 密碼可以自訂

<https://samwhelp.github.io/book-ubuntu-basic-skill/book/content/account/adduser.html>



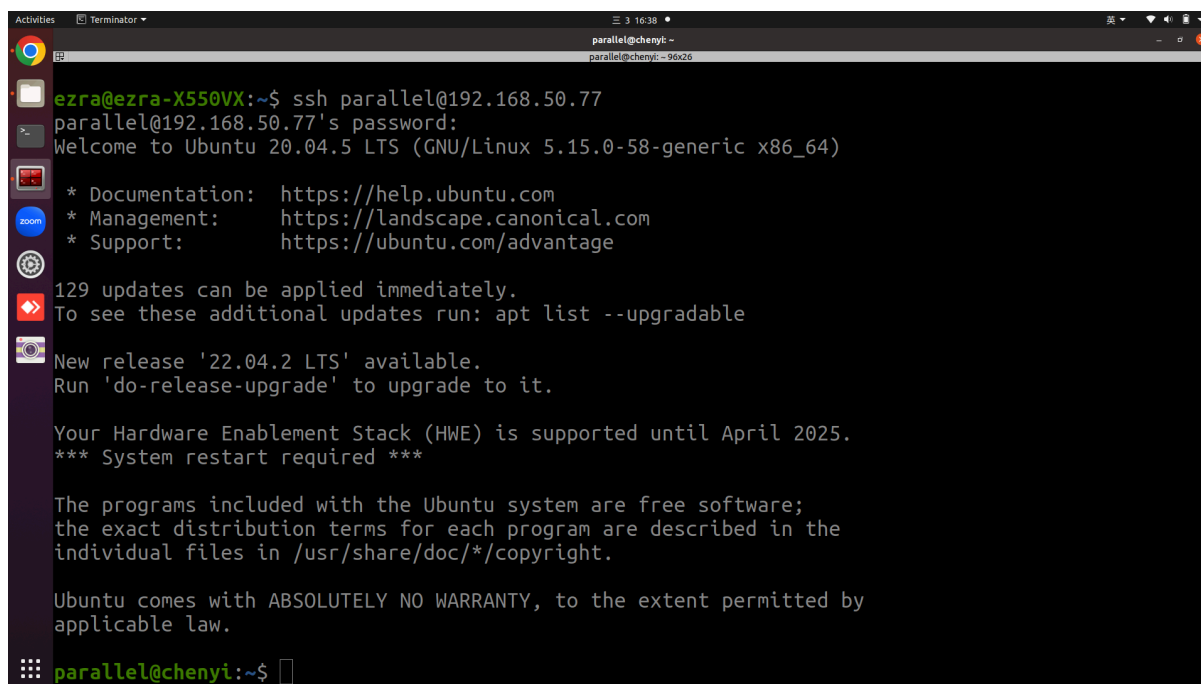
```
Activities Terminator
[exited]
chenyi@chenyi:~$ exit
logout
Connection to 192.168.50.77 closed.
ezra@ezra-X550VX:~$
```



```
Activities Terminator
chenyi@chenyi:~$ sudo adduser parallel
Adding user `parallel' ...
Adding new group `parallel' (1001) ...
Adding new user `parallel' (1001) with group `parallel' ...
Creating home directory `/home/parallel' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for parallel
Enter the new value, or press ENTER for the default
  Full Name []:
   Room Number []:
   Work Phone []:
   Home Phone []:
    Other []:
Is the information correct? [Y/n] y
chenyi@chenyi:~$ ls /home/
chenyi  parallel
chenyi@chenyi:~$
```

## 任務五

組員再一次ssh連到組長第腦, 但是這次連到parallel這個使用者



A terminal window titled 'Terminator' showing an SSH session. The user 'ezra@ezra-X550VX' connects to 'parallel@192.168.50.77'. The remote user is 'parallel@chenyi'. The terminal displays the Ubuntu 20.04.5 LTS welcome message, system updates (129 available), and hardware enablement stack (HWE) support until April 2025. The prompt is 'parallel@chenyi:~\$'.

```
ezra@ezra-X550VX:~$ ssh parallel@192.168.50.77
parallel@192.168.50.77's password:
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-58-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

129 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

New release '22.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Your Hardware Enablement Stack (HWE) is supported until April 2025.
*** System restart required ***

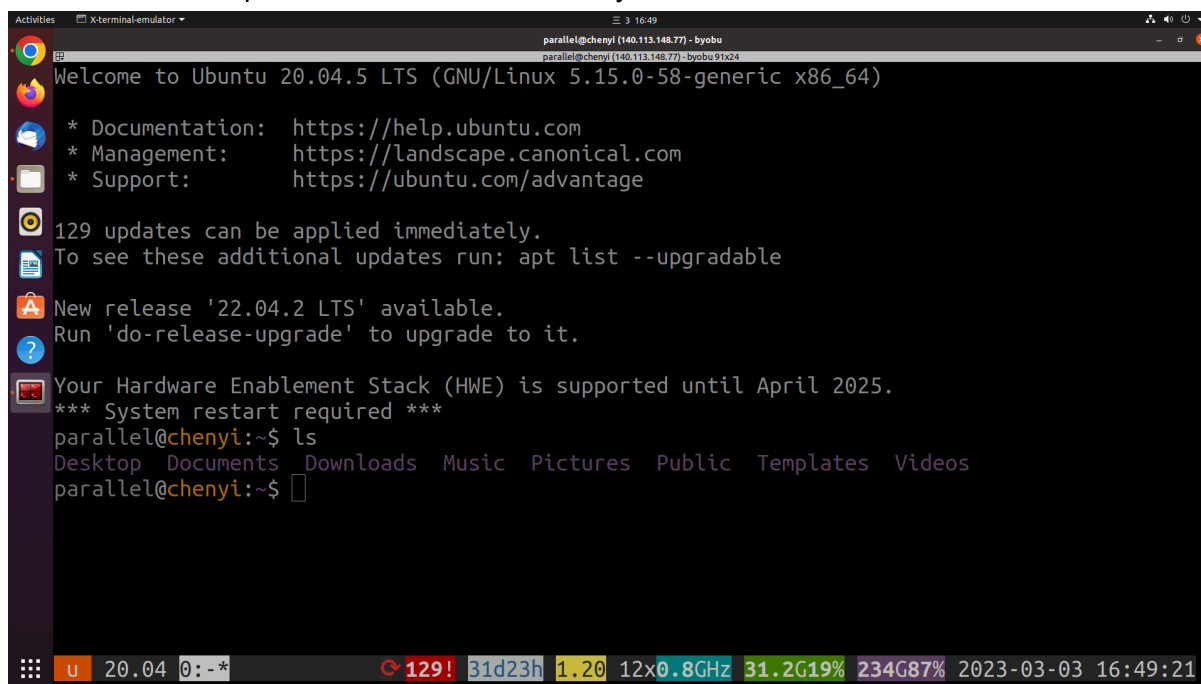
The programs included with the Ubuntu system are free software;
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individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

parallel@chenyi:~$
```

## 任務六

組長切換使用者到parallel使用者，雙方都進入byobu



A terminal window titled 'x-terminal-emulator' showing a byobu session. The user 'parallel@chenyi' is logged in. The terminal displays the Ubuntu 20.04.5 LTS welcome message, system updates, and hardware enablement stack (HWE) support until April 2025. The user runs 'ls' and the prompt is 'parallel@chenyi:~\$'. The bottom status bar shows system statistics: 'u 20.04 0:~\*' and '129! 31d23h 1.20 12x0.8GHz 31.2G19% 234G87% 2023-03-03 16:49:21'.

```
parallel@chenyi (140.113.148.77) - byobu
parallel@chenyi (140.113.148.77) - byobu 91x24

Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-58-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

129 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

New release '22.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Your Hardware Enablement Stack (HWE) is supported until April 2025.
*** System restart required ***

parallel@chenyi:~$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos
parallel@chenyi:~$
```

u 20.04 0:~\* 129! 31d23h 1.20 12x0.8GHz 31.2G19% 234G87% 2023-03-03 16:49:21

找助教demo

## 任務七

合作寫出一個turtle.py，能夠讓使用者透過指令控制烏龜位置，發揮parallel coding精神，一個人寫，一個人看，多討論，合作完成

```
parallel@chenyi:~$ python3 turtle.py
turtle pose: [1, 1]
Enter command (up, down, left, right): up
New turtle pose: [1, 2]
Enter command (up, down, left, right): right
New turtle pose: [2, 2]
Enter command (up, down, left, right): down
New turtle pose: [2, 1]
Enter command (up, down, left, right): left
New turtle pose: [1, 1]
Enter command (up, down, left, right): hello
Invalid command, please try again
Enter command (up, down, left, right): down
New turtle pose: [1, 0]
Enter command (up, down, left, right): down
New turtle pose: [1, -1]
Enter command (up, down, left, right): left
New turtle pose: [0, -1]
Enter command (up, down, left, right): up
New turtle pose: [0, 0]
Enter command (up, down, left, right):
```

20.04 0:~\* 129! 31d23h 0.18 12x3.7GHz 31.2G21% 234G87% 2023-03-03 17:17:03

找助教demo