EECS302002 計算機網路概論
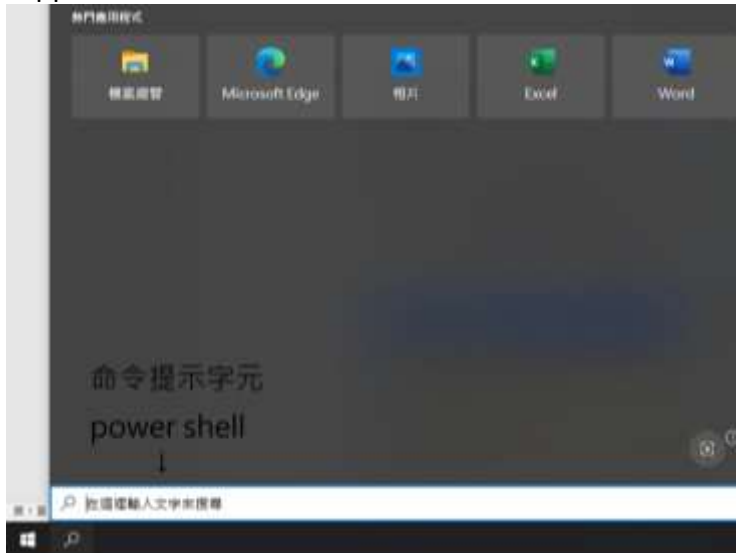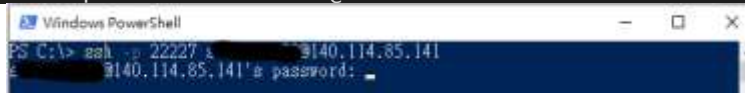# SSH server tutorial

1. Use SSH to connect to our lab server

    Step1: Open, cmd, Power Shell, or any other shell (such as MobaXterm) that supports ssh

    Step2: Connect to the lab server by using SSH command at port number 22227 (case sensitive).
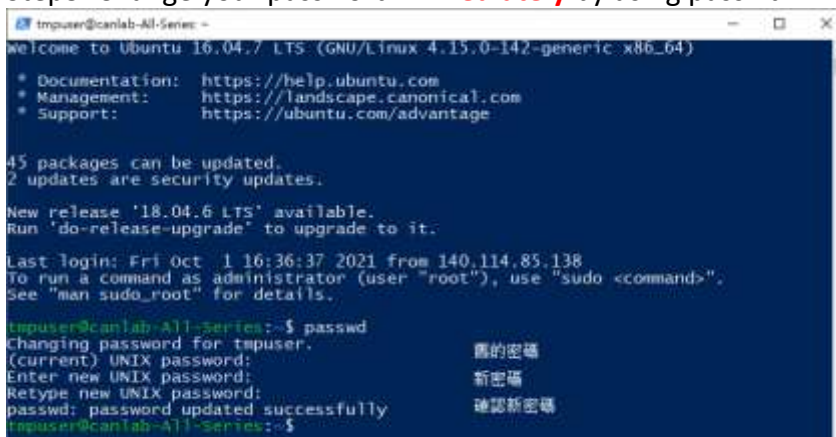
    ```
    ssh -p 22227 username@140.114.85.141
    ```


    username = "s" + your student ID (ex. s110062401@140.114.85.141)
    password = 123

    Step3: Change your password **immediately** by using passwd.

    For more information, check linux ssh

2. Use SCP to transfer your files.
   step1: Open cmd or Power Shell or any other shell support ssh
   step2: Enter SCP command, use port number 22227 (case sensitive)
   ```
   scp -P 22227 <source> <destination>
   ```
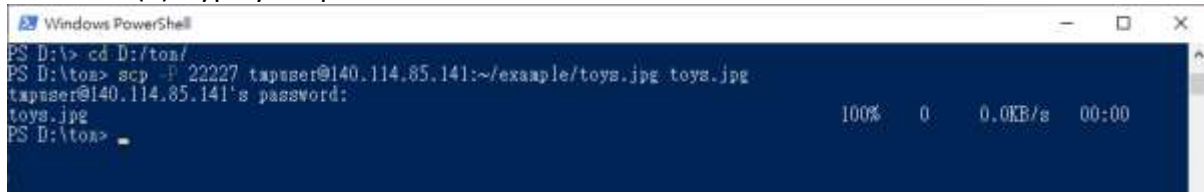   In Ubuntu, path "~/" = "/home/[user]/"

   example 1: Download [user@host]:~/example/toys.jpg and save to D:/ton/
   (1) cd D:/ton
   (2) Enter scp -P 22227 [user@host]:~/example/toys.jpg toys.jpg
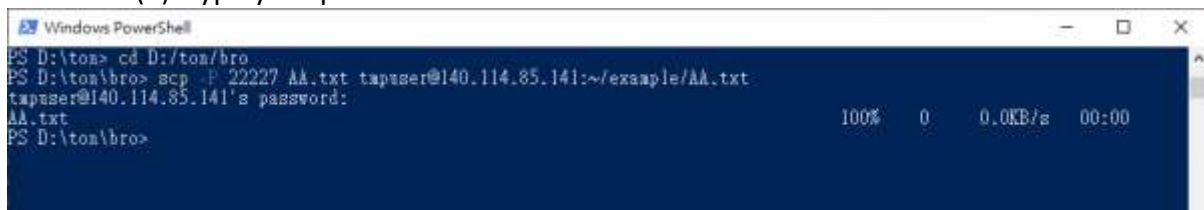   (3) Type your password

   ```
   Windows PowerShell                                    —  □  ×
   PS D:\> cd D:/ton/
   PS D:\ton> scp -P 22227 tmpuser@140.114.85.141:~/example/toys.jpg toys.jpg
   tmpuser@140.114.85.141's password:
   toys.jpg                              100%   0   0.0KB/s   00:00
   PS D:\ton>
   ```

   example 2: Upload D:/ton/bro/AA.txt to [user@host]:~/example/
   (1) cd D:/ton/bro
   (2) Enter scp -P 22227 AA.txt [user@host]:~/example/AA.txt
   (3) Type your password

   ```
   Windows PowerShell                                    —  □  ×
   PS D:\ton> cd D:/ton/bro
   PS D:\ton\bro> scp -P 22227 AA.txt tmpuser@140.114.85.141:~/example/AA.txt
   tmpuser@140.114.85.141's password:
   AA.txt                                100%   0   0.0KB/s   00:00
   PS D:\ton\bro>
   ```
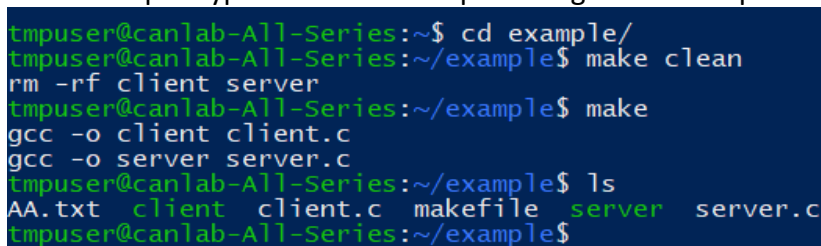
   For more information, check Linux scp

3. Use makefile to compile C files or delete output files
   Step1: Enter your working directory
   Step2: Type "make clean" to delete old output files
   Step3: Type "make" to compile and generate output files

   ```
   tmpuser@canlab-All-Series:~$ cd example/
   tmpuser@canlab-All-Series:~/example$ make clean
   rm -rf client server
   tmpuser@canlab-All-Series:~/example$ make
   gcc -o client client.c
   gcc -o server server.c
   tmpuser@canlab-All-Series:~/example$ ls
   AA.txt  client  client.c  makefile  server  server.c
   tmpuser@canlab-All-Series:~/example$
   ```

4. Other useful Linux commands
   Linux 常用指令 - HackMD

5. Alternative way: [推薦] MobaXterm - 強大方便好操作的 SSH Client 客戶端連線軟
   體 - RicharLin.tw