Homework 06

1. (20%) In Ubuntu, file security is important to us. You must know about changing the access privilege. Please explain meaning of the following commands with options as detailed as possible.

A. `chmod go=r myfile`

myfile 的 group others 的權限設為 r--

B. `chmod a=rw myfile`

myfile 的 user group others 的權限設為 rw-

C. `chmod g+rwx myfile`

myfile 的 group 的權限加上 rwx

D. `chmod o-x myfile`

myfile 的 others 的權限減去 x

E. `chmod -R 777 mydir/`

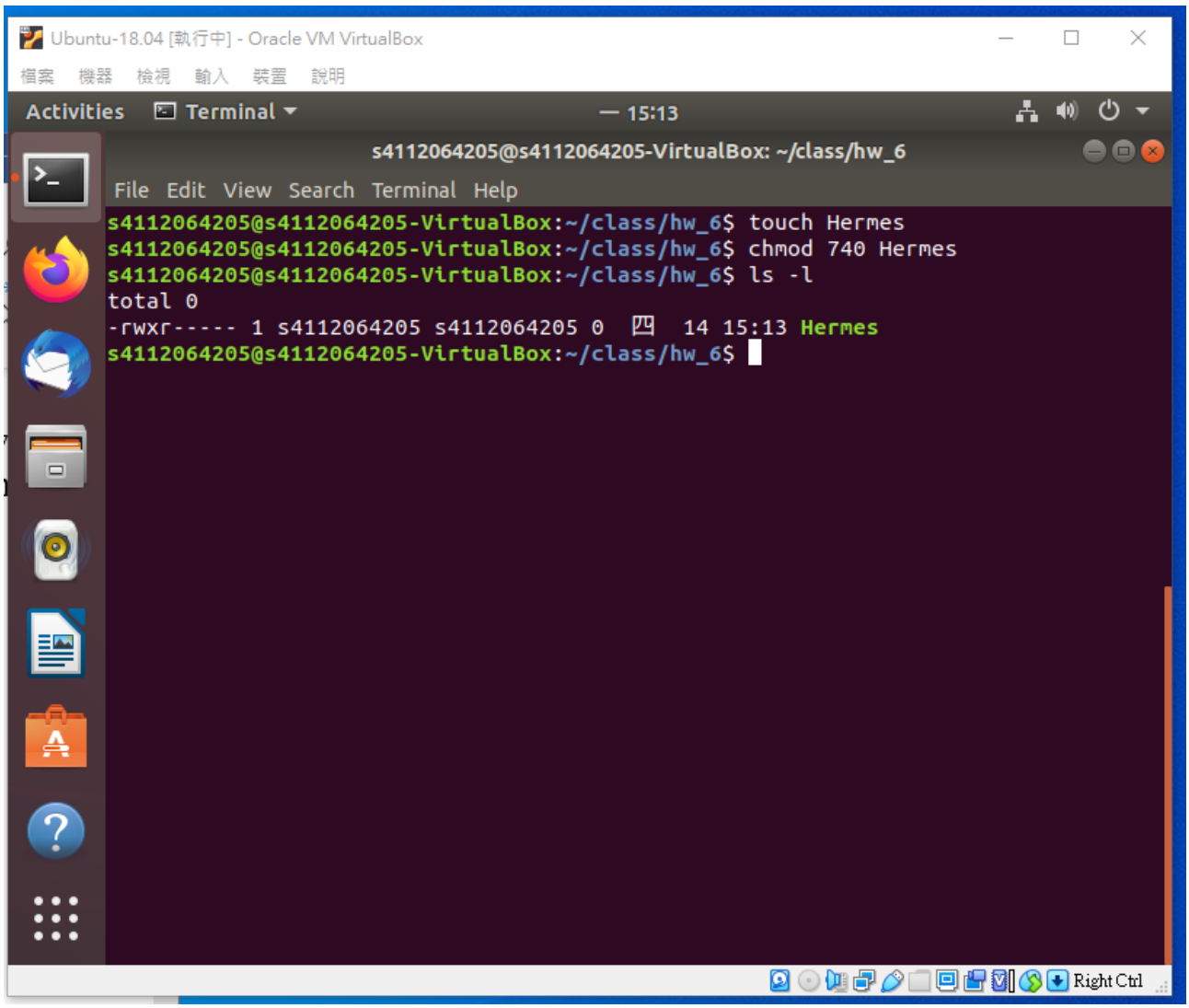
遞迴設定 `mydir` 資料夾中的權限都為 `rwxrwxrwx`

2. (20%) Create a file named “Hermes”, and change the access privilege. User should have read, write and execute privilege, and same group should have read privilege, and others don’t have any privilege.

ANS:

(command)
touch Hermes
chmod 740 Hermes

(screenshot)


Ubuntu-18.04 [執行中] - Oracle VM VirtualBox
檔案 機器 檢視 輸入 裝置 說明
Activities
Terminal
15:13
s4112064205@s4112064205-VirtualBox: ~/class/hw_6
File Edit View Search Terminal Help
s4112064205@s4112064205-VirtualBox:~/class/hw_6$ touch Hermes
s4112064205@s4112064205-VirtualBox:~/class/hw_6$ chmod 740 Hermes
s4112064205@s4112064205-VirtualBox:~/class/hw_6$ ls -l
total 0
-rwxr----- 1 s4112064205 s4112064205 0 四 14 15:13 Hermes
s4112064205@s4112064205-VirtualBox:~/class/hw_6$
Right Ctrl

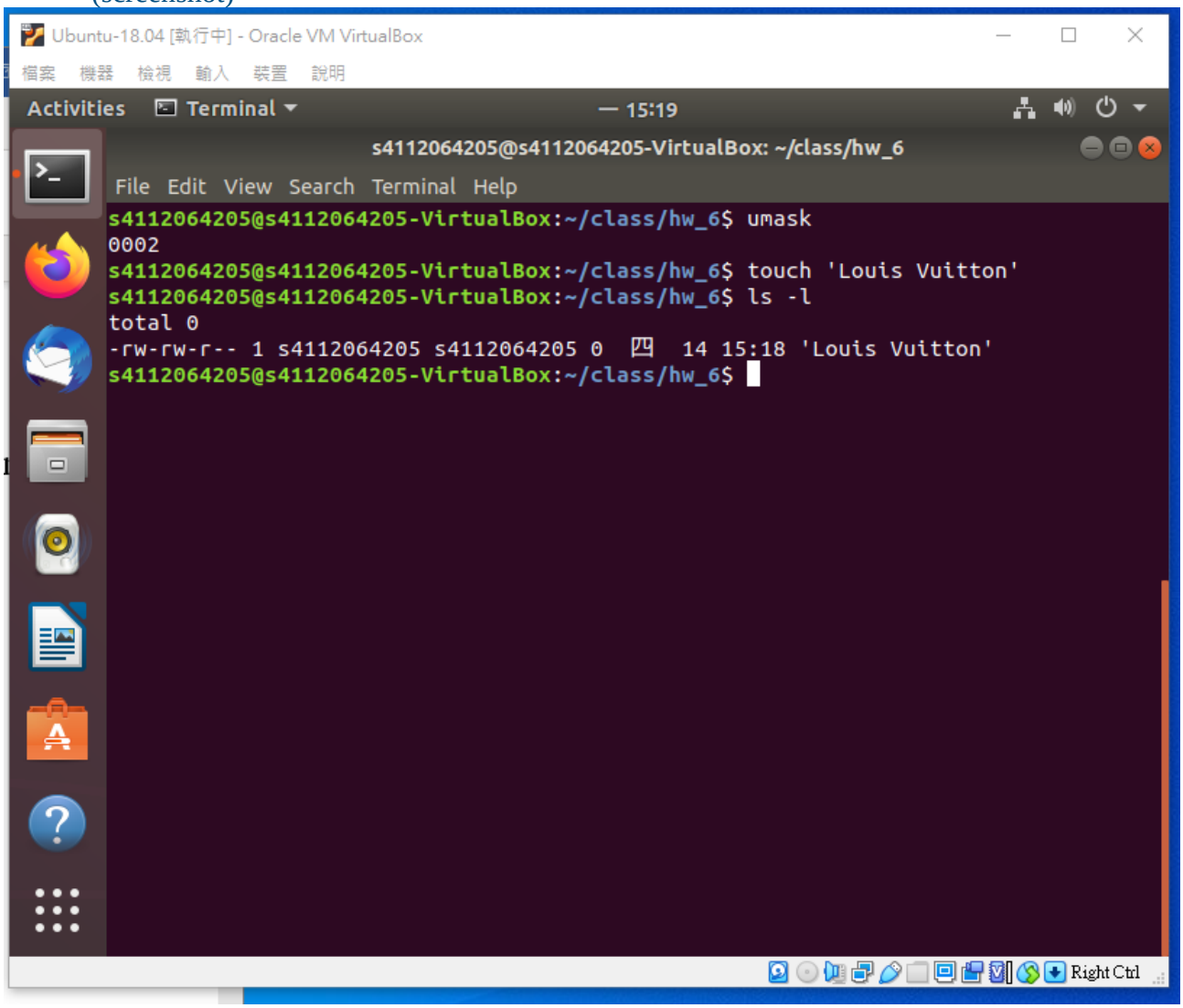
3 - 5 is a Question Group

3. (20%) First, show the current mask value. Then, create a file named “Louis Vuitton”, and show the detailed information of the file via command **“`ls -l`”**

ANS:

(command)
umask
touch ‘Louis Vuitton’
ls -l

(screenshot)



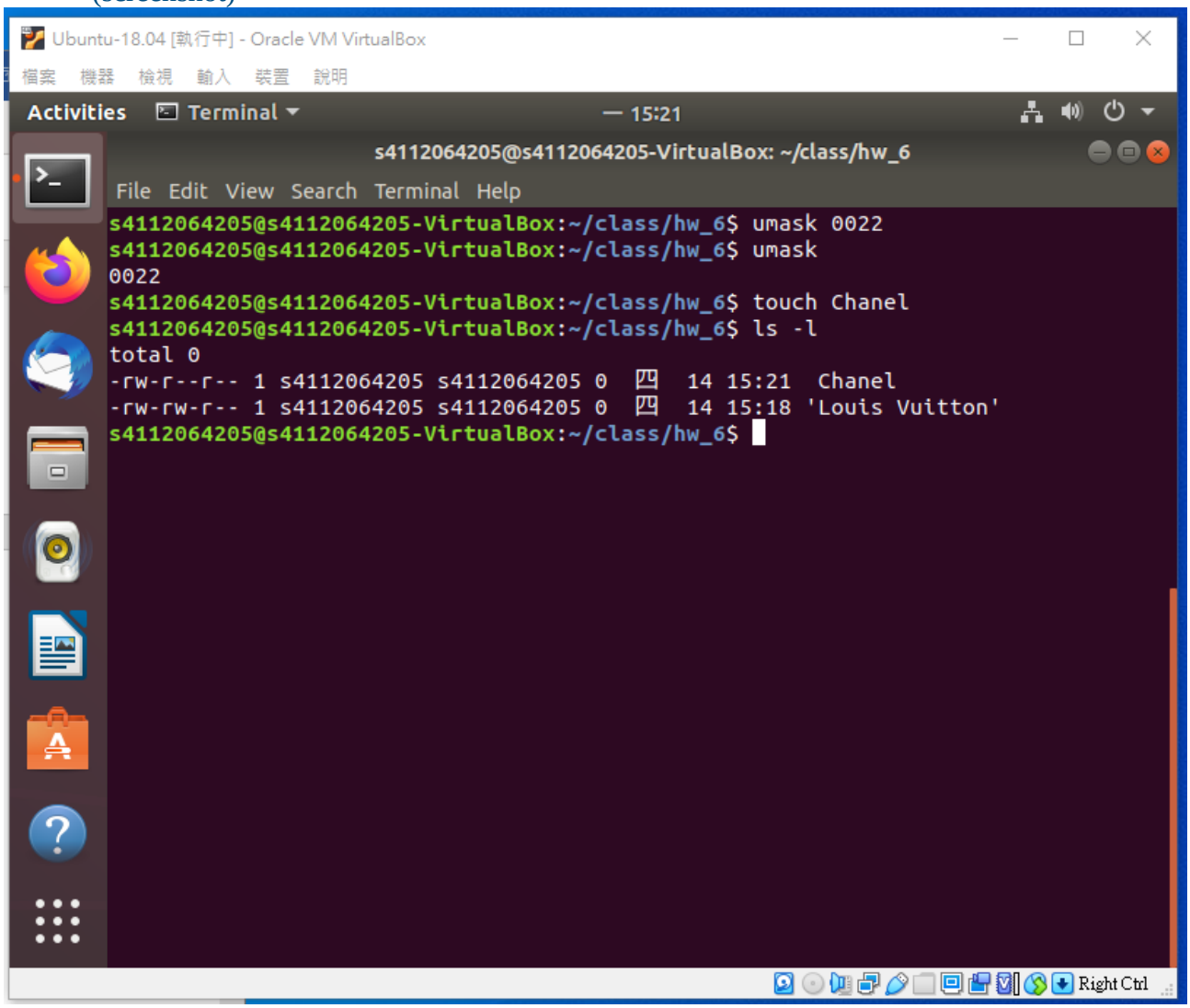
4. (20%) Change the mask value to “0022”. Then, show the current mask value. Then, create a file named “Chanel”, and show the detailed information of the file named “Chanel” via command **“`ls -l`”**

ANS:

(command)
umask 0022

umask
touch Chanel
ls -l

(screenshot)



5. (20%) Based on Questions 3 and 4, you will notice the difference in access privileges between the two. Please provide a detailed explanation of how the mask value set by umask affects these differences.

ANS:
for Questions 3
C = 002 = 000 000 010
C’ = 111 111 101
B = 666 = 110 110 110
A = B AND C’ = 110 110 100 = 664(octal) = 110110100(binary) = rw-rw-r--(symbolic)

for Questions 4
C = 022 = 000 010 010
C’ = 111 101 101
B = 666 = 110 110 110
A = B AND C’ = 110 100 100 = 644(octal) = 110100100(binary) = rw-r--r--(symbolic)