

Homework 09

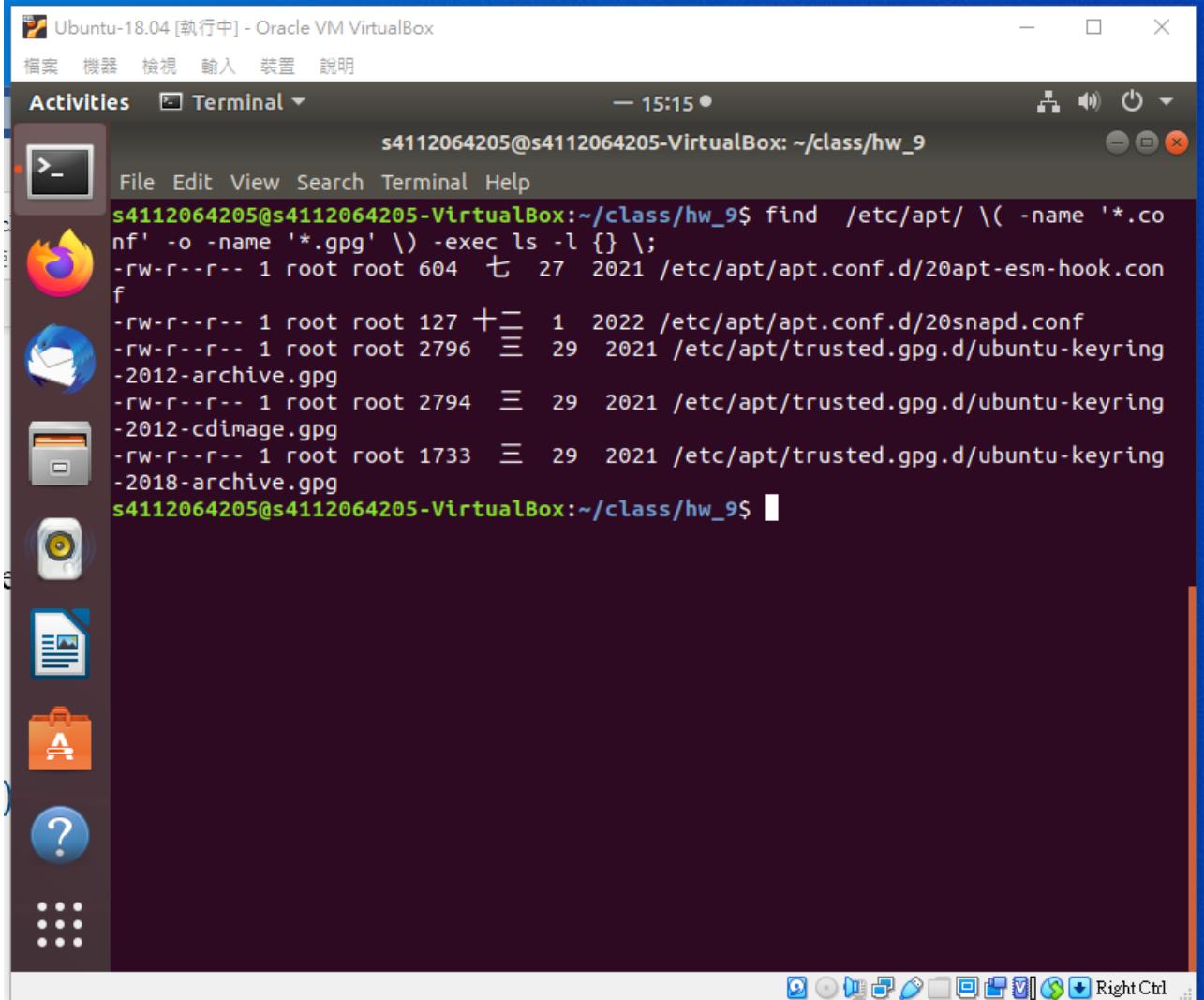
1. Show the detailed information of all files whose names end with “.conf” or “.gpg” at all levels under the directory “/etc/apt/“.

ANS:

(command)

```
find /etc/apt/ \( -name '*.conf' -o -name '*.gpg' \) -exec ls -l {} \;
```

(screenshot)



```
s4112064205@s4112064205-VirtualBox:~/class/hw_9$ find /etc/apt/ \( -name '*.conf' -o -name '*.gpg' \) -exec ls -l {} \;
-rw-r--r-- 1 root root 604  7 27 2021 /etc/apt/apt.conf.d/20apt-esm-hook.conf
-rw-r--r-- 1 root root 127 + 1 2022 /etc/apt/apt.conf.d/20snapd.conf
-rw-r--r-- 1 root root 2796  3 29 2021 /etc/apt/trusted.gpg.d/ubuntu-keyring-2012-archive.gpg
-rw-r--r-- 1 root root 2794  3 29 2021 /etc/apt/trusted.gpg.d/ubuntu-keyring-2012-cdimage.gpg
-rw-r--r-- 1 root root 1733  3 29 2021 /etc/apt/trusted.gpg.d/ubuntu-keyring-2018-archive.gpg
s4112064205@s4112064205-VirtualBox:~/class/hw_9$
```

2 is a Question Group

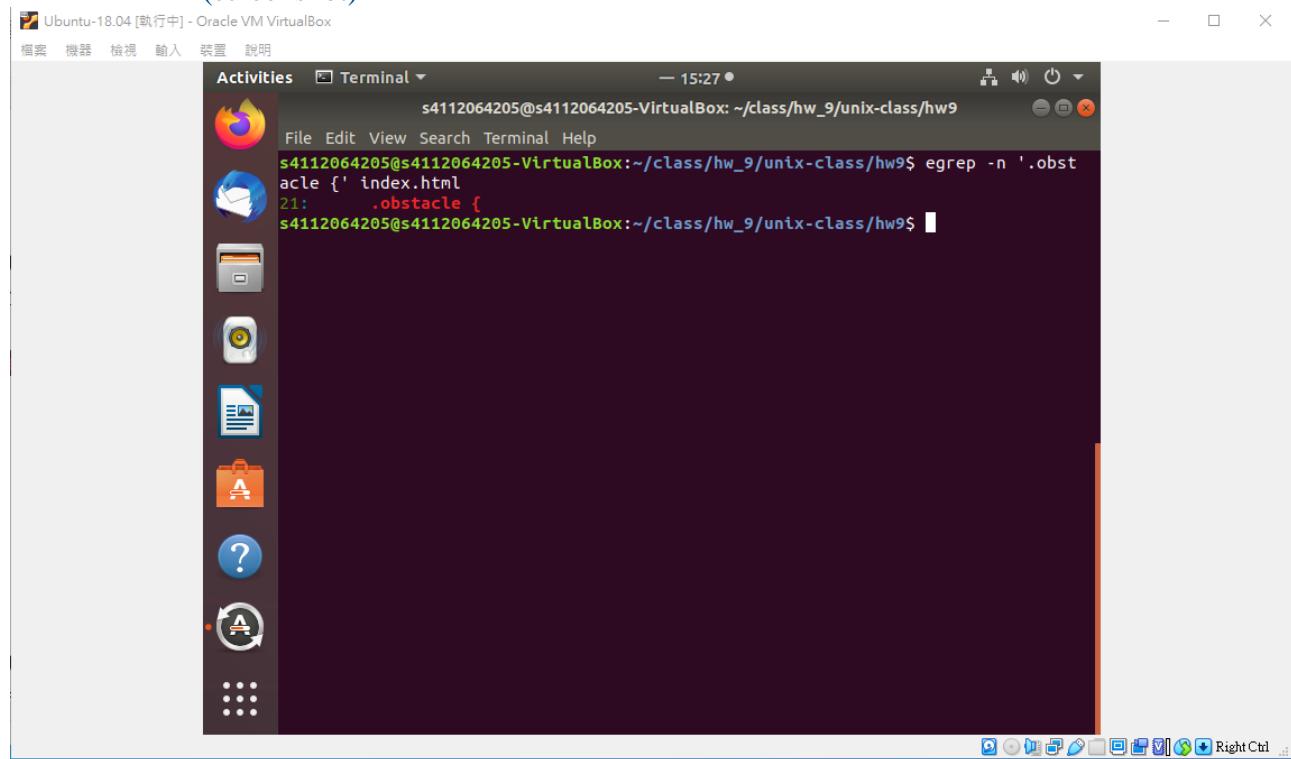
2. Follow the following steps:
 - a. Use command “`sudo apt install git`” to install git
 - b. Use command “`git clone https://gitlab.com/aidslab902/unix-class.git`” to download the directory “`unix-class/`”.
 - c. Change the working directory to “`unix-class/hw9/`” and answer the below questions.

- I. Use regular expression to find the lines contains “.obstacle {}” in the file “index.html” and show the corresponding line number.

Example: 21: .obstacle {

ANS:

(command)
egrep -n '.obstacle {' index.html
(screenshot)



```
s4112064205@s4112064205-VirtualBox:~/class/hw_9/unix-class/hw9$ egrep -n '.obstacle {' index.html
21:     .obstacle {
```

- II. Use regular expression to find the lines contains “@app.route(‘/’)” in the file “app.py” and show the corresponding line number. (All text in that line should be all red.)

Example: 20:@app.route("/api/echo", methods=["POST"])
32:@app.route("/api/time")
41:@app.route("/api/add", methods=["POST"])

ANS:

(command)
grep -nE '^@app.route\("api/.*"\)' app.py
(screenshot)

A screenshot of a Linux desktop environment, specifically Ubuntu 18.04, running in Oracle VM VirtualBox. The terminal window shows the following command and its output:

```
s4112064205@s4112064205-VirtualBox:~/class/hw_9/unix-class/hw9$ grep -nE '^@app\n.route\(\"/api/.*\"' app.py
20:@app.route("/api/echo", methods=["POST"])
32:@app.route("/api/time")
41:@app.route("/api/add", methods=["POST"])
s4112064205@s4112064205-VirtualBox:~/class/hw_9/unix-class/hw9$
```

- III. Sort file “Starbucks-Venti” in ascending order using the first column (with the leftmost column as the first) and you should ignore lowercase and uppercase (= consider lowercase and uppercase be equivalent)

ANS:

(command)

sort -k 1 -f Starbucks-Venti

(screenshot)

A screenshot of a Linux desktop environment, specifically Ubuntu 18.04, running in Oracle VM VirtualBox. The terminal window shows the following command and its output:

```
s4112064205@s4112064205-VirtualBox:~/class/hw_9/unix-class/hw9$ sort -k 1 -f Starbucks-Venti
Black_Tea_Latte 160
caffé_Americano 125
Caffe_Latte 150
Caramel_Macchiato 150
Espresso 95
s4112064205@s4112064205-VirtualBox:~/class/hw_9/unix-class/hw9$
```

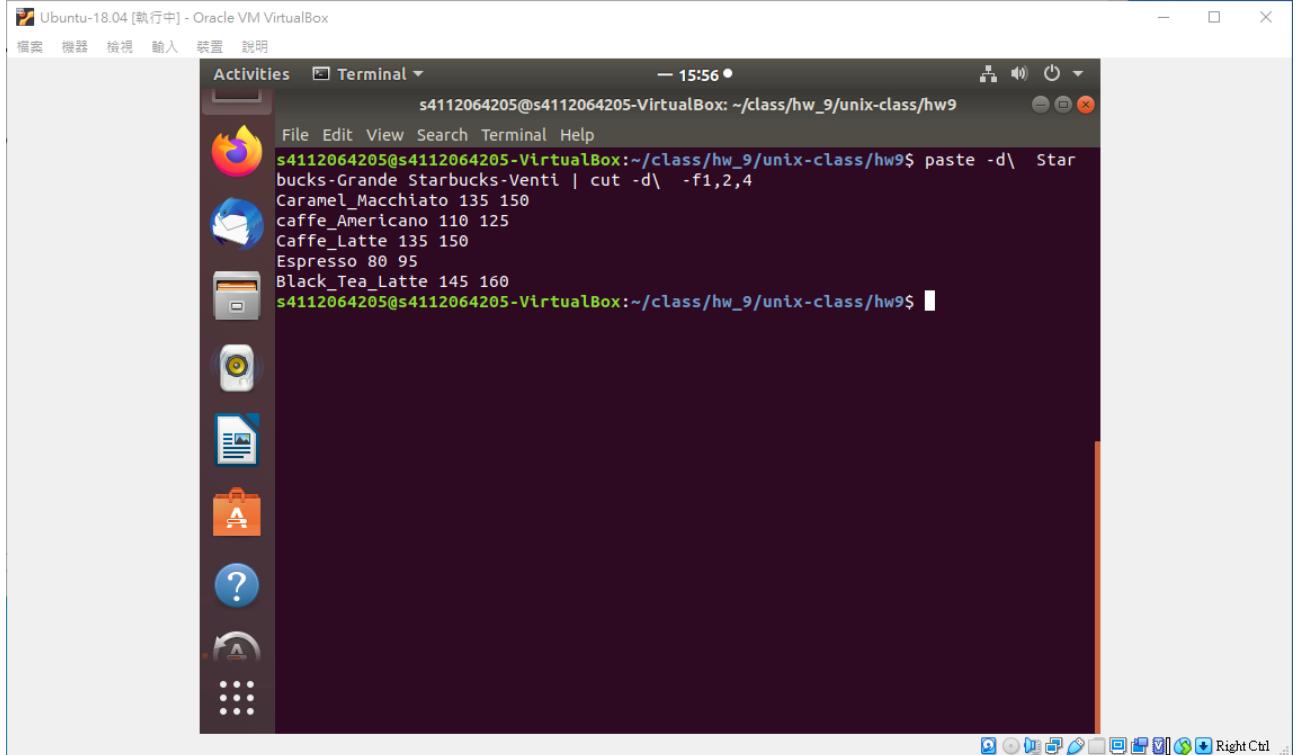
- IV. Only use “cut” and “paste” to display a table that only has drink_name, Grande_price, Venti_price at column 1, 2, 3.

ANS:

(command)

```
Paste -d\ Starbucks-Grande Starbucks-Venti | cut -d\ -f1,2,4
```

(screenshot)



The screenshot shows a terminal window titled "Ubuntu-18.04 [執行中] - Oracle VM VirtualBox". The terminal window has a dark background and contains the following text:

```
s4112064205@s4112064205-VirtualBox:~/class/hw_9/unix-class/hw9$ paste -d\ Starbucks-Grande Starbucks-Venti | cut -d\ -f1,2,4
Caramel_Macchiato 135 150
caffè_Americano 110 125
Caffe_Latte 135 150
Espresso 80 95
Black_Tea_Latte 145 160
s4112064205@s4112064205-VirtualBox:~/class/hw_9/unix-class/hw9$
```

- V. Sort file “Starbucks-Grande” in descending order using the second column (with the leftmost column as the first) and the sorting must be based on actual numeric values.

ANS:

(command)

```
sort -gr -k 2 Starbucks-Grande
```

(screenshot)

