

Homework 08

1 - 3 is a Question Group

1. Create a file named “RickRoll.song” with following content, and you should compress this file to “RickRoll.song.gz”.

Content:

```
Never gonna give you up, never gonna let you down  
Never gonna run around and desert you  
Never gonna make you cry, never gonna say goodbye  
Never gonna tell a lie and hurt you
```

ANS:

(command)

```
cat > RickRoll.song
```

```
input : Never gonna give you up, never gonna let you down  
Never gonna run around and desert you  
Never gonna make you cry, never gonna say goodbye  
Never gonna tell a lie and hurt you
```

<Ctrl+d>

```
gzip RickRoll.song
```

(screenshot)

The screenshot shows a terminal window titled "Ubuntu-18.04 [執行中] - Oracle VM VirtualBox". The terminal session starts with the command `cat > Rickroll.song`, followed by the lyrics of the Rickroll song. After pressing Ctrl+D to finish input, the command `gzip Rickroll.song` is run to compress the file. Finally, the command `ls` is run to list the contents of the directory, showing the compressed file `Rickroll.song.gz`.

```
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ cat > Rickroll.song  
Never gonna give you up, never gonna let you down  
Never gonna run around and desert you  
Never gonna make you cry, never gonna say goodbye  
Never gonna tell a lie and hurt you  
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ gzip Rickroll.song  
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ ls  
Rickroll.song.gz  
s4112064205@s4112064205-VirtualBox:~/class/hw_8$
```

2. Display the contents of the compressed file named “RickRoll.song.gz”, and show the original text content without decompression.

ANS:

(command)

```
cat RickRoll.song.gz  
zcat RickRoll.song.gz
```

(screenshot)

```
Ubuntu-18.04 [執行中] - Oracle VM VirtualBox
檔案 機器 檢視 輸入 裝置 說明
Activities Terminal 15:11
s4112064205@s4112064205-VirtualBox:~/class/hw_8
File Edit View Search Terminal Help
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ cat Rickroll.song.gz
♦Oh♦Rickroll.songU♦♦
♦L♦;♦$(*♦*♦*♦#♦
F♦♦0M♦♦♦{0♦3♦zK♦♦♦D♦r♦F♦♦♦♦-♦♦♦sQ♦♦q"
%*♦
*W♦♦♦}♦♦♦♦s4112064205@s4112064205-VirtualBox:~/class/hw_8$ zcat Rickroll.son
g.gz
Never gonna give you up, never gonna let you down
Never gonna run around and desert you
Never gonna make you cry, never gonna say goodbye
Never gonna tell a lie and hurt you
s4112064205@s4112064205-VirtualBox:~/class/hw_8$
```

3. Follow up the following steps:
- Copy the file "RickRoll.song.gz" and rename it to "NGGYU.song.gz"
 - Use two different methods to decompress "RickRoll.song.gz" and "NGGYU.song.gz"
 - Display the contents of the two decompressed files.

ANS:

(command)

```
cp RickRoll.song.gz NGGYU.song.gz  
gunzip RickRoll.song.gz  
gzip -d NGGYU.song.gz  
cat RickRoll.song NGGYU.song
```

(screenshot)

The screenshot shows a terminal window titled "Ubuntu-18.04 [執行中] - Oracle VM VirtualBox". The terminal session starts with the command `cp Rickroll.song.gz NGGYU.song.gz`, followed by `ls` which lists the files `NGGYU.song.gz` and `Rickroll.song.gz`. Then, `gunzip Rickroll.song.gz` is run, followed by `gzip -d NGGYU.song.gz`. Finally, `ls` is run again, showing the files `NGGYU.song` and `Rickroll.song`. The terminal then executes `cat Rickroll.song NGGYU.song`, displaying the lyrics of the Rickroll song: "Never gonna give you up, never gonna let you down, Never gonna run around and desert you, Never gonna make you cry, never gonna say goodbye, Never gonna tell a lie and hurt you, Never gonna give you up, never gonna let you down, Never gonna run around and desert you, Never gonna make you cry, never gonna say goodbye, Never gonna tell a lie and hurt you".

4 - 6 is a Question Group

4. Create a file named "WutheringWaves.characters" with following content.

NOTICE: The separator is a tab. You may use two tabs to improve readability.

Content text:

Phoebe	Spectro	Rectifier	2	1
Carlotta	Glacio	Pistols	1	1
Shorekeeper	Spectro	Rectifier	1	1
Cantarella	Havoc	Rectifier	0	0
Changli	Fusion	Sword	1	0
Jinhsy	Spectro	Broadblade	2	1
Rover	Aero	Sword	0	1

ANS:

(command)

vi WutheringWaves.characters

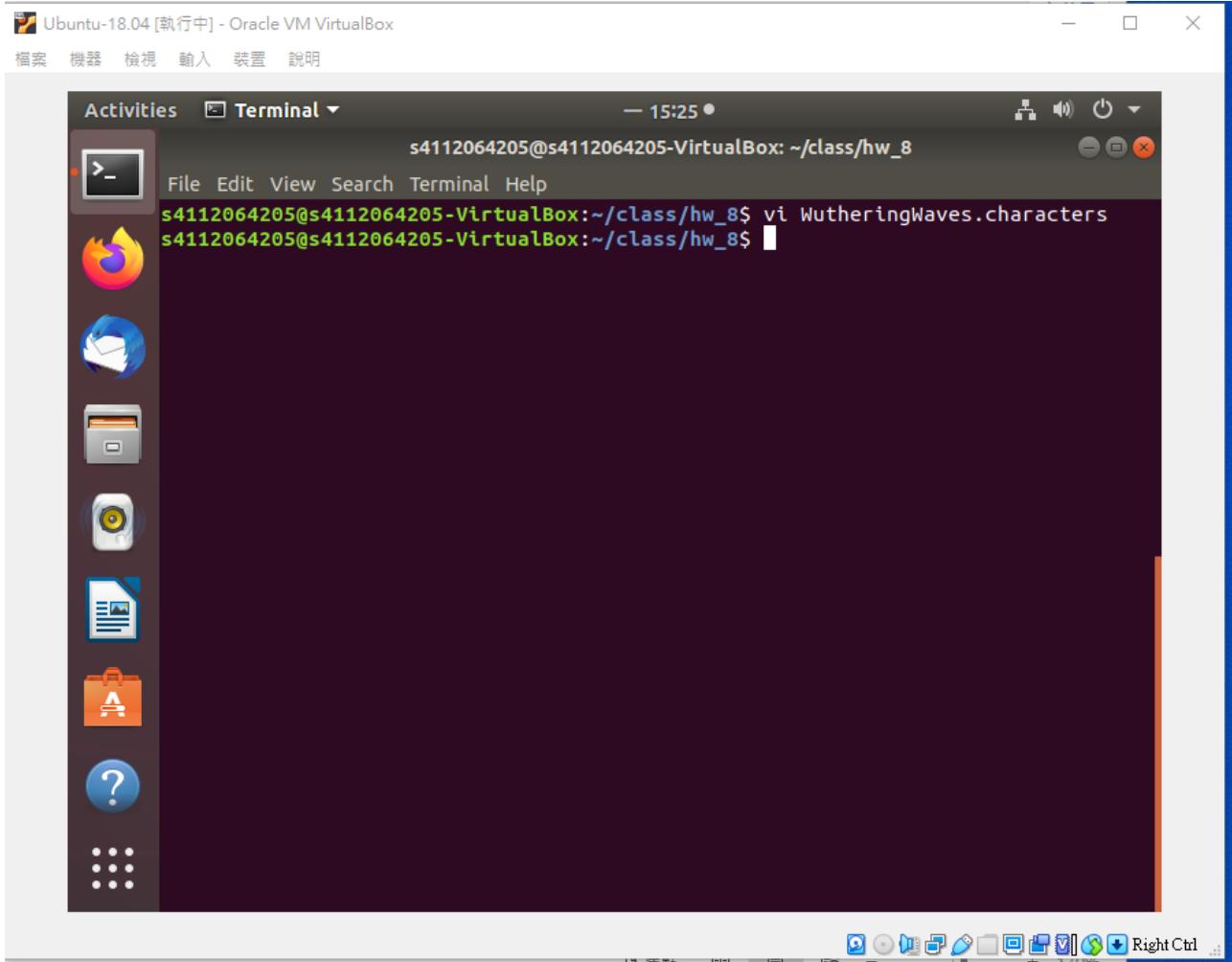
A

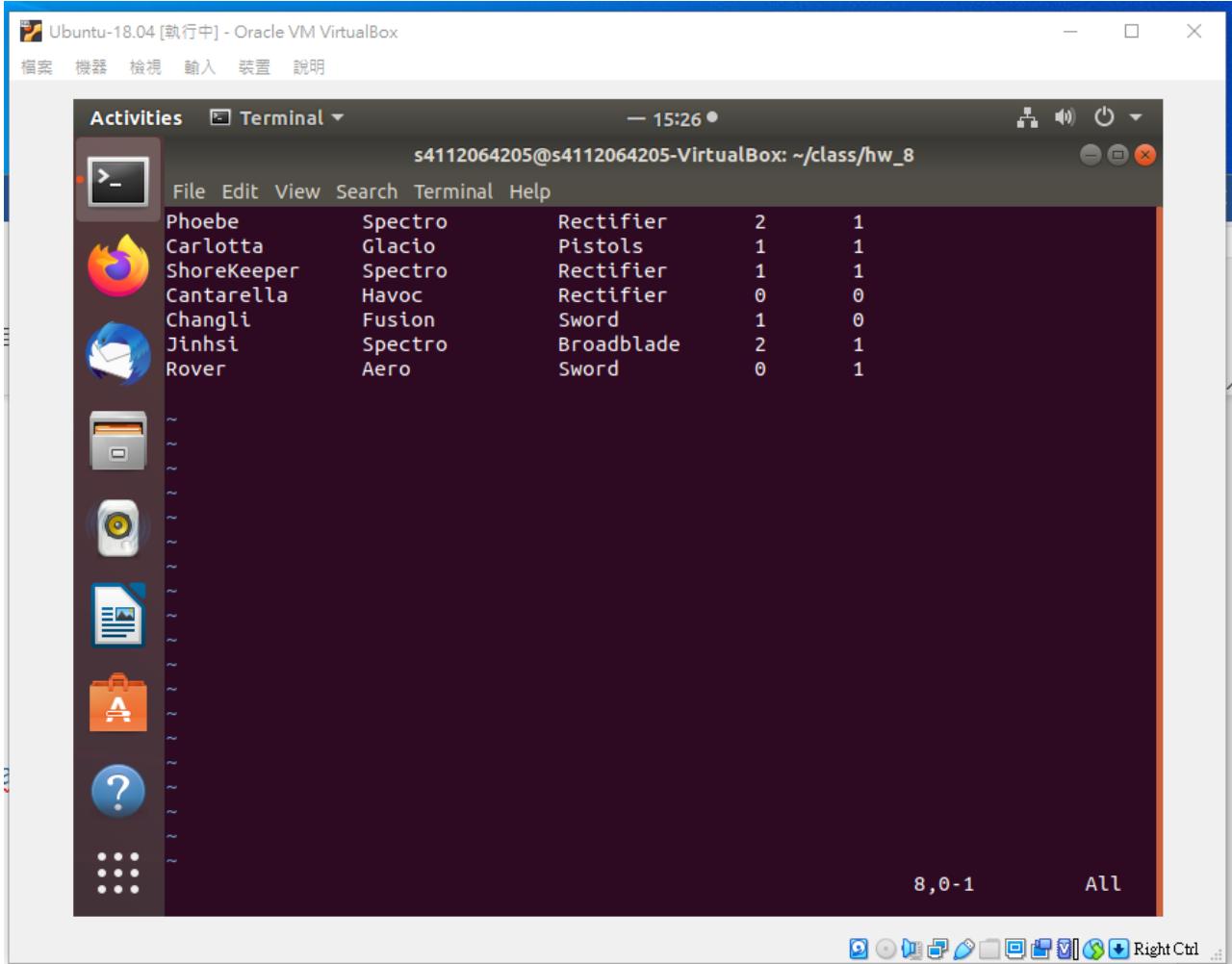
input : Phoebe	Spectro	Rectifier	2	1
Carlotta	Glacio	Pistols	1	1
Shorekeeper	Spectro	Rectifier	1	1
Cantarella	Havoc	Rectifier	0	0
Changli	Fusion	Sword	1	0
Jinhsy	Spectro	Broadblade	2	1
Rover	Aero	Sword	0	1

<Esc>

:wq

(screenshot)





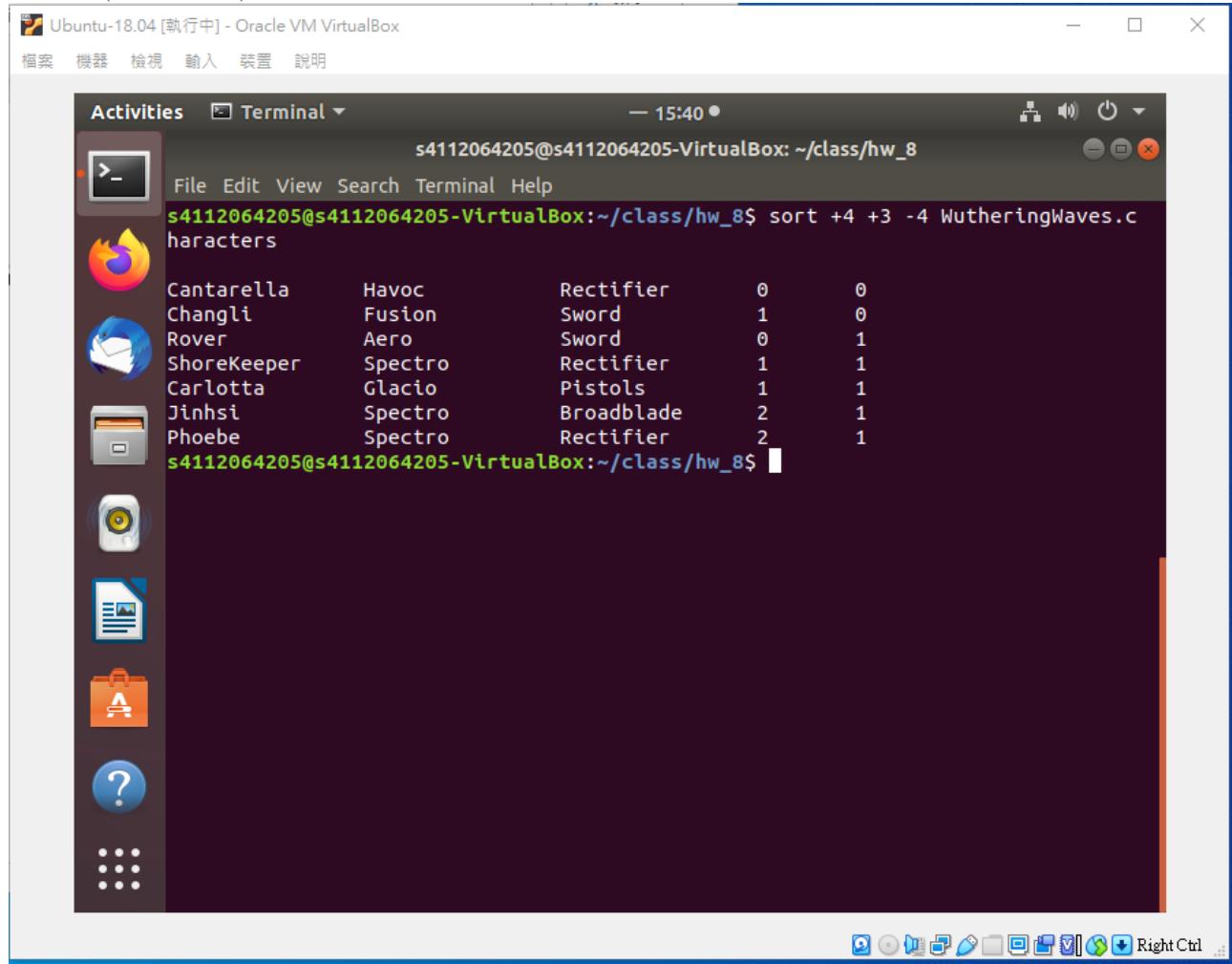
5. Sort the data in descending order, prioritizing the fifth column, followed by the fourth column.

ANS:

(command)

sort +4 +3 -4 WutheringWaves.characters

(Screenshot)



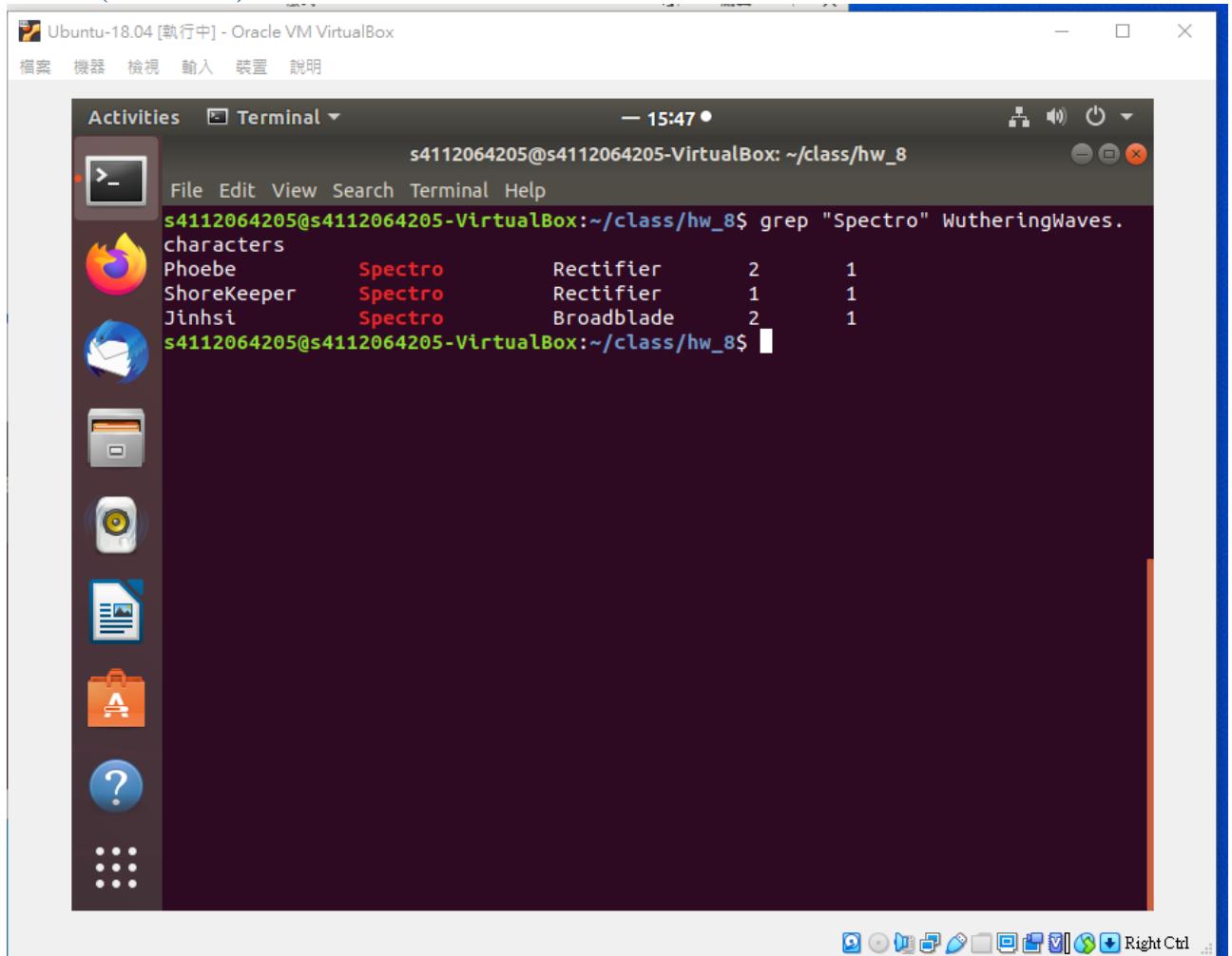
6. Find the lines that contains “Spectro” in the file “WutheringWaves.characters” using **one-line** command

ANS:

(command)

grep “Spectro” WutheringWaves.characters

(screenshot)



7. Display all files whose names start with an even number at all levels under the directory “/etc/apt”

ANS:

(command)
find /etc/apt \(-name '[02468]*' \) -print

(screenshot)

