

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)

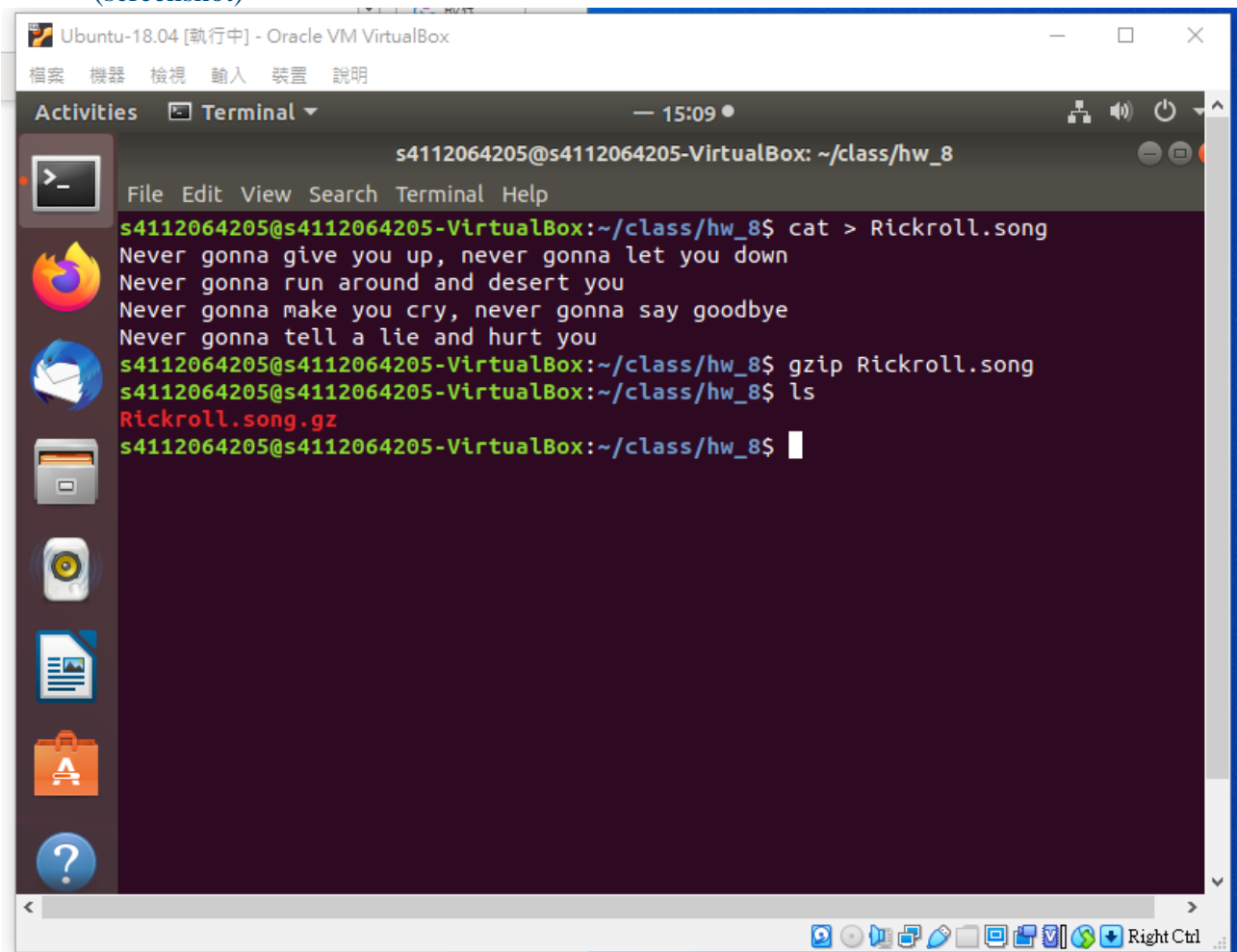
cat > RickRoll.song

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

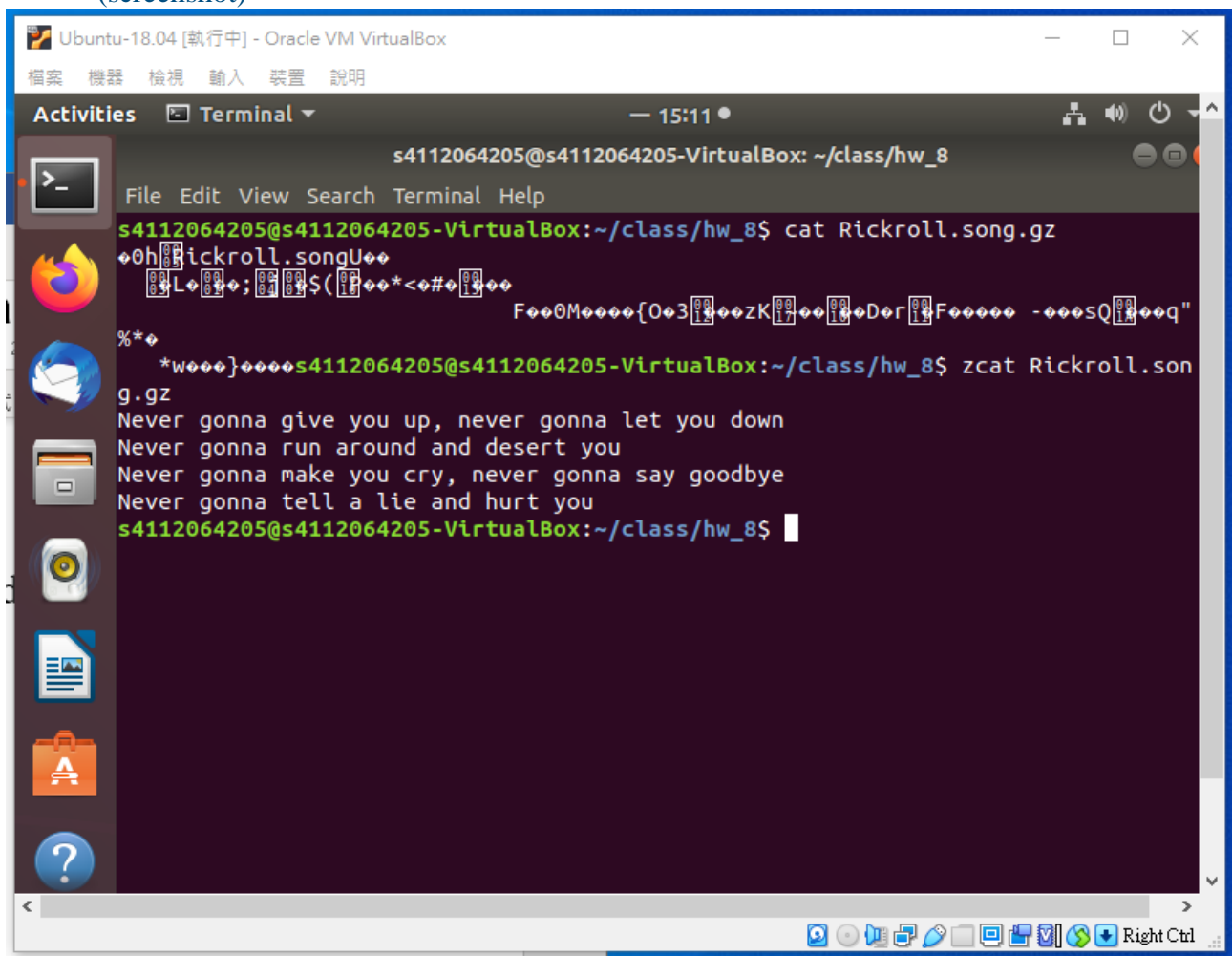
(screenshot)



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

(command)

zcat RickRoll.song.gz



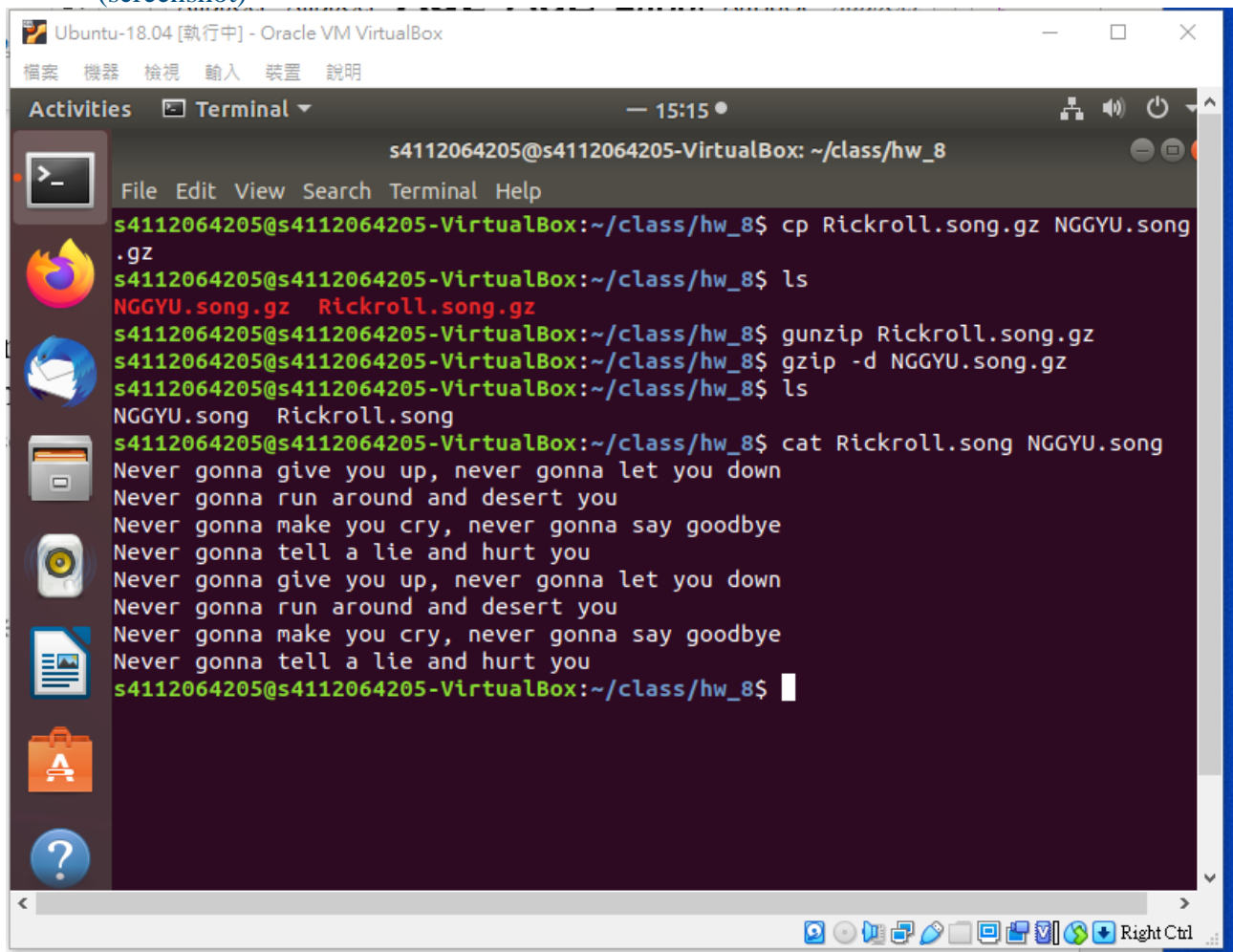
3. Follow up the following steps:
 - A. Copy the file "RickRoll.song.gz" and rename it to "NGGYU.song.gz"
 - B. Use two different methods to decompress "RickRoll.song.gz" and "NGGYU.song.gz"
 - C. Display the contents of the two decompressed files.

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 output is as follows:

```
s4112064205@s4112064205-VirtualBox: ~/class/hw_8
File Edit View Search Terminal Help
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ cp Rickroll.song.gz NGGYU.song
.gz
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ ls
NGGYU.song.gz  Rickroll.song.gz
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ gunzip Rickroll.song.gz
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ gzip -d NGGYU.song.gz
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ ls
NGGYU.song  Rickroll.song
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ cat Rickroll.song NGGYU.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
s4112064205@s4112064205-VirtualBox:~/class/hw_8$
```

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
Jinhsi	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
Jinhsi	Spectro	Broadblade	2	1
Rover	Aero	Sword	0	1

<Esc>

:wq

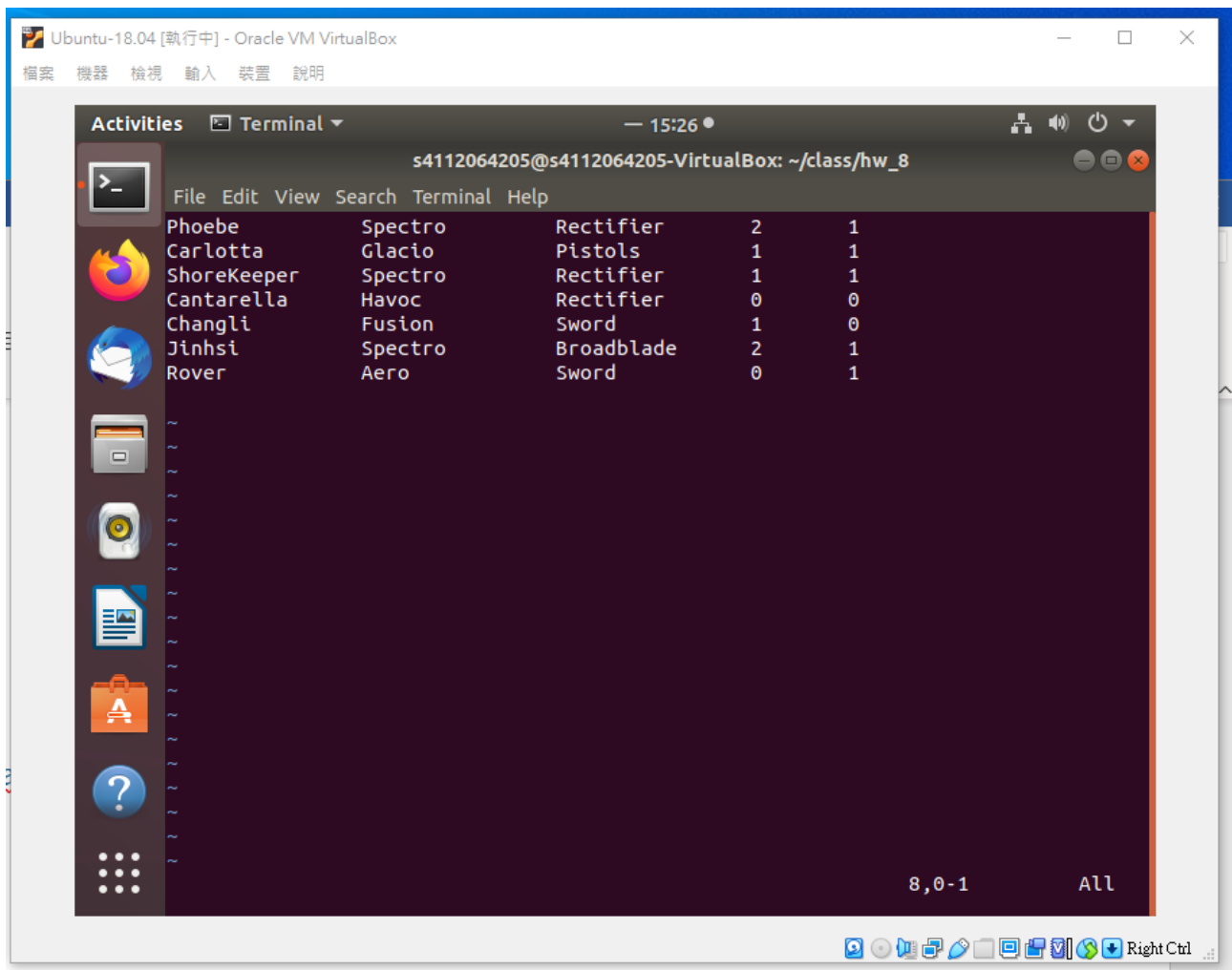
(screenshot)

Activities Terminal 15:25

s4112064205@s4112064205-VirtualBox: ~/class/hw_8

File Edit View Search Terminal Help

```
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ vi WutheringWaves.characters
s4112064205@s4112064205-VirtualBox:~/class/hw_8$
```



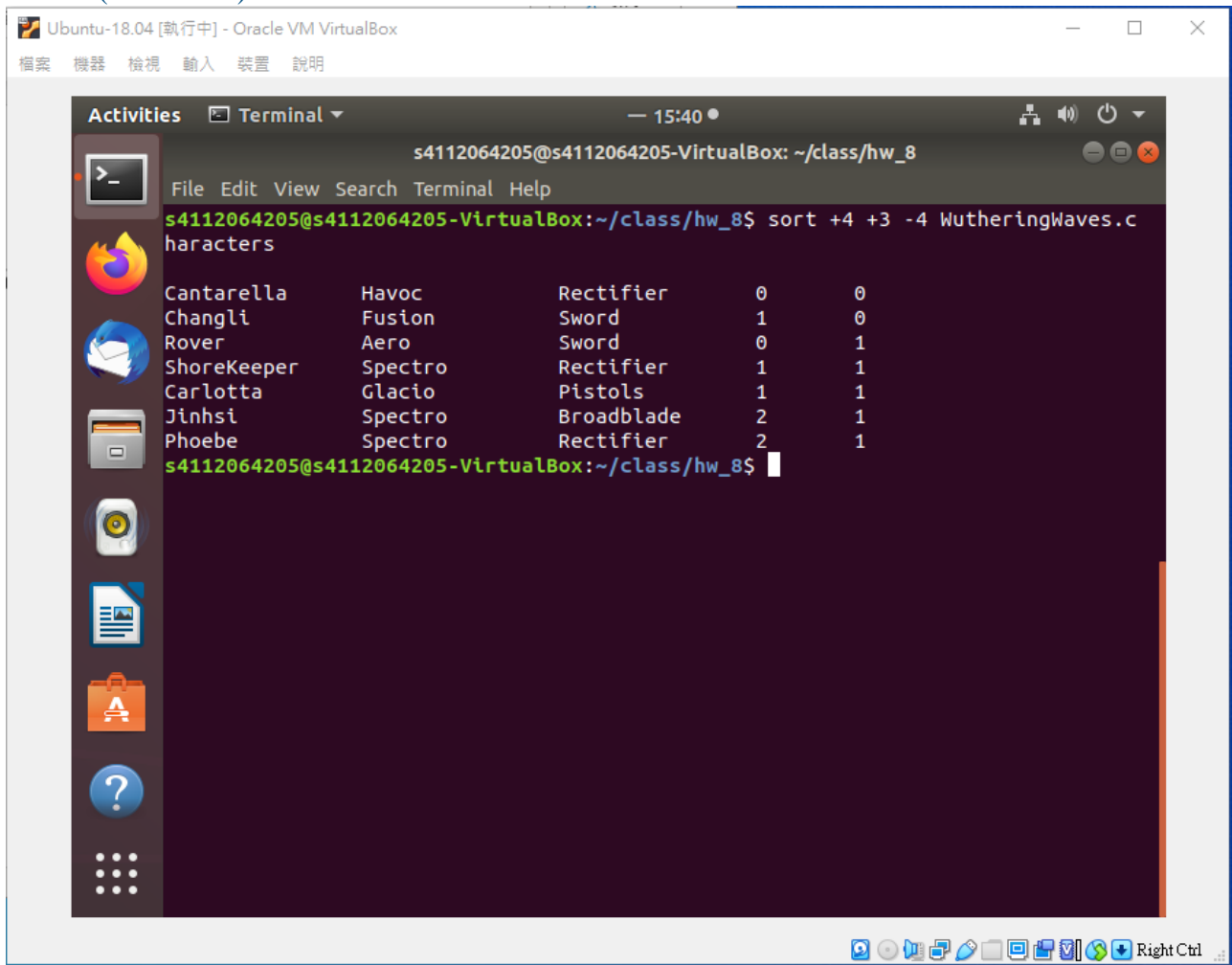
5. Sort the data in descending order, prioritizing the fifth column, followed by the fourth column.

ANS:

(command)

`sort +4 +3 -4 WutheringWaves.characters`

(screenshot)



The screenshot shows a terminal window titled "Ubuntu-18.04 [執行中] - Oracle VM VirtualBox". The terminal displays the command `sort +4 +3 -4 WutheringWaves.characters` and its output, which is a table of character data sorted by the fifth column (values 0, 1, 2) and then by the fourth column (values Rectifier, Sword, Broadblade). The output is as follows:

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

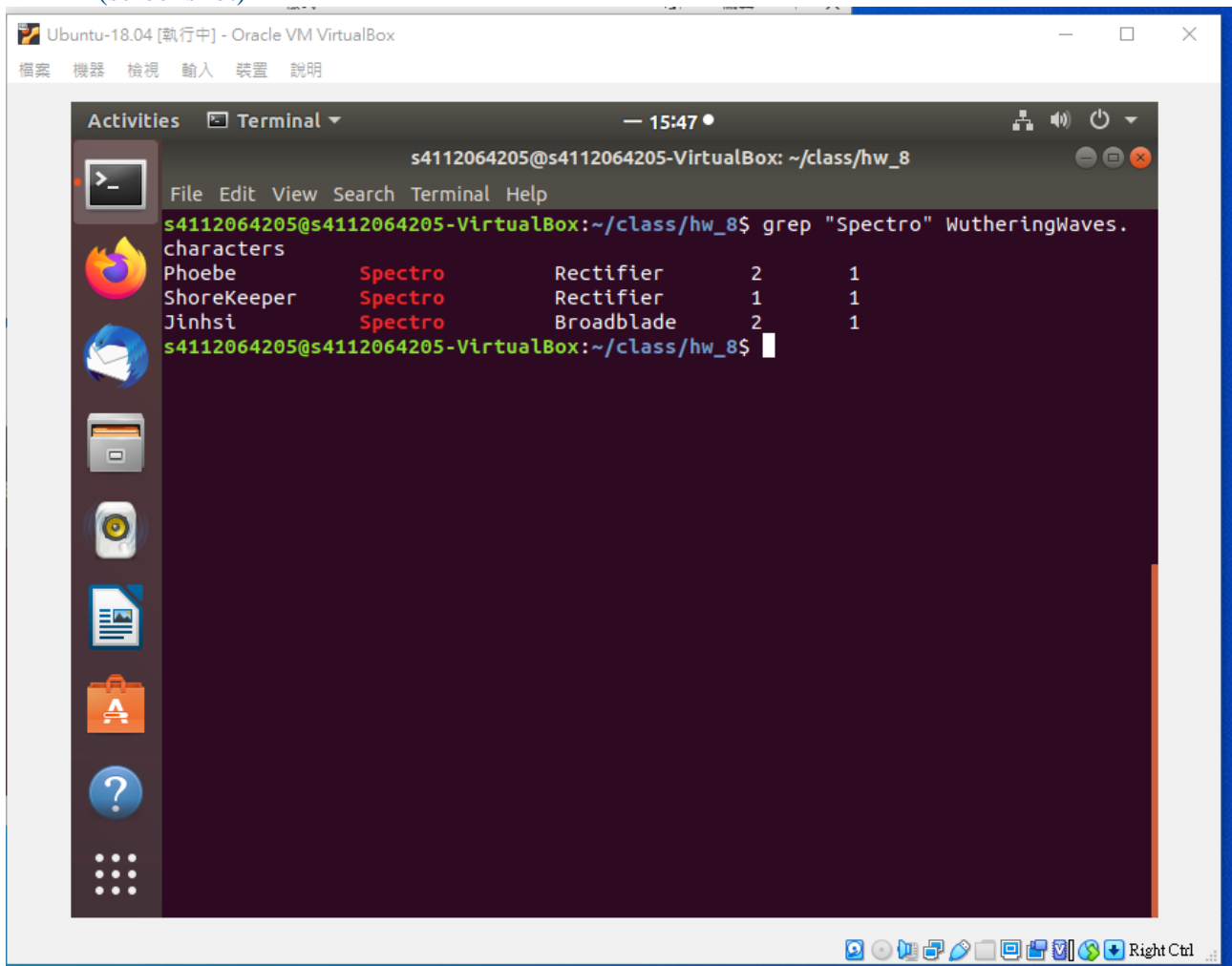
6. Find the lines that contains "Spectro" in the file "WutheringWaves.characters" using **one-line** command

ANS:

(command)

`grep "Spectro" WutheringWaves.characters`

(screenshot)



The screenshot shows a terminal window titled "Ubuntu-18.04 [執行中] - Oracle VM VirtualBox". The terminal displays the command `grep "Spectro" WutheringWaves.characters` and its output:

```
s4112064205@s4112064205-VirtualBox: ~/class/hw_8
s4112064205@s4112064205-VirtualBox:~/class/hw_8$ grep "Spectro" WutheringWaves.characters
Phoebe      Spectro      Rectifier    2          1
ShoreKeeper Spectro      Rectifier    1          1
Jinhsi      Spectro      Broadblade   2          1
s4112064205@s4112064205-VirtualBox:~/class/hw_8$
```

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)

