

- Use Linux command to print the output of uptime of your server to the terminal and at the same time write the output to a file using one command. (hint: use pipe |).

```
[root@f6e8b1c4701 ~]# cd -
[root@f6e8b1c4701 ~]# mkdir advance_command_lab
[root@f6e8b1c4701 ~]# cd advance_command_lab; { echo ' Ali, 1, Riyadh;'; echo ' Saad, 2, Jeddah;'; echo ' Waleed, 3, Dammam;'; echo ' Noura, 4, Makkah;'; echo ' Sarah, 5, Yanbu;'; } >> students.csv;
{ echo ' Ali-Ahmad;'; echo ' Ali-Khaled;'; echo ' Waleed-Fahad;'; echo ' Noura-Saad;'; echo ' Sarah-Mohammed;'; } >> names.csv; { echo ' Ali, 1, Dammam;'; echo ' Saad, 2, Dammam;'; echo ' Waleed, 3, Al-Dammam;'; echo ' Noura, 4, al-dammam;'; echo ' Sarah, 5, al-dammam;'; } >> raw_data.csv;
[root@f6e8b1c4701 advance_command_lab]# uptime | tee uptime_output.txt
18:41:12 up 1 day, 18:23, 0 users, load average: 0.00, 0.01, 0.00
```

- Use Linux command to sort the content of csv file we created earlier (students.csv) and update the file with the sorted data.

```
[root@f6e8b1c4701 advance_command_lab]# sort -t ';' -k 1 -o students.csv students.csv
[root@f6e8b1c4701 advance_command_lab]# cat students.csv
Ali, 1, Riyadh;
Noura, 4, Makkah;
Saad, 2, Jeddah;
Sarah, 5, Yanbu;
Waleed, 3, Dammam;
[root@f6e8b1c4701 advance_command_lab]#
```

- Use cut command to concat the first and last name and add space in between and semicolon at the end of the records in the csv file we created earlier (names.csv) and save the content to another file called **full_name.csv**.

```
[root@f6e8b1c4701 advance_command_lab]# cut -d ';' -f 1 names.csv | awk -F '-' '{ print $1 " " $2 ";" }' > full_name.csv
[root@f6e8b1c4701 advance_command_lab]# full_name.csv
bash: full_name.csv: command not found
[root@f6e8b1c4701 advance_command_lab]# cat full_name.csv
Ali Ahmad;
Ali Khaled;
Waleed Fahad;
Noura Saad;
Sarah Mohammed;
```

- Use only the **sed** command or do all the changes in one line to clean the data in the csv file we created earlier (raw_data.csv). To clean the data unify the city name to **Dammam**.

```
[root@f6e8b1c4701 advance_command_lab]# sed 's/[,.*,/, Dammam,/' raw_data.csv > cleaned_data.csv
[root@f6e8b1c4701 advance_command_lab]# cat cleaned_data.csv
Ali, Dammam, Dammam;
Saad, Dammam, Dammam;
Waleed, Dammam, Al-Dammam;
Noura, Dammam, al-dammam;
Sarah, Dammam, al-dammam;
```