

Lab 8

- **Tasks:**

1. 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 |).

```
waleed-Fahad; echo ' Noura-Saad; echo ' Sarah-Mohammed; } >
> names.csv; { echo ' Ali, 1, Dammam; echo ' Saad, 2, Dammam; ec
ho ' waleed, 3, Al-Dammam; echo ' Noura, 4, al-dammam; echo ' Sa
rah, 5, al-dammam; } } >> raw_data.csv;
[root@72c1d27a1b36 advance_command_lab]# uptime
10:44:10 up 1:56, 0 users, load average: 0.00, 0.00, 0.00
[root@72c1d27a1b36 advance_command_lab]# uptime | tee output.txt
10:46:50 up 1:58, 0 users, load average: 0.00, 0.00, 0.00
[root@72c1d27a1b36 advance_command_lab]# cat output.txt
10:46:50 up 1:58, 0 users, load average: 0.00, 0.00, 0.00
[root@72c1d27a1b36 advance_command_lab]# ls
names.csv output.txt raw_data.csv students.csv
[root@72c1d27a1b36 advance_command_lab]# cat students.csv
Ali, 1, Riyadh;
Saad, 2, Jeddah;
Waleed, 3, Dammam;
Noura, 4, Makkah;
Sarah, 5, Yanbu;
[root@72c1d27a1b36 advance_command_lab]# sort students.csv
Ali, 1, Riyadh;
Noura, 4, Makkah;
Saad, 2, Jeddah;
```

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

```
@72c1d27a1b36:~/advance_command_lab
waleed, 3, Dammam;
[root@72c1d27a1b36 advance_command_lab]# cat students.csv
Ali, 1, Riyadh;
Saad, 2, Jeddah;
Waleed, 3, Dammam;
Noura, 4, Makkah;
Sarah, 5, Yanbu;
[root@72c1d27a1b36 advance_command_lab]# sort -o students.csv
AC
[root@72c1d27a1b36 advance_command_lab]# cat students.csv
Ali, 1, Riyadh;
Saad, 2, Jeddah;
Waleed, 3, Dammam;
Noura, 4, Makkah;
Sarah, 5, Yanbu;
[root@72c1d27a1b36 advance_command_lab]# sort students.csv -o students.
csv
[root@72c1d27a1b36 advance_command_lab]# cat students.csv
Ali, 1, Riyadh;
Noura, 4, Makkah;
Saad, 2, Jeddah;
Sarah, 5, Yanbu;
waleed, 3, Dammam;
[root@72c1d27a1b36 advance_command_lab]# ls
names.csv output.txt raw_data.csv students.csv
[root@72c1d27a1b36 advance_command_lab]# cat names.csv
Ali-Ahmad;
Ali-Khaled;
Waleed-Fahad;
Noura-Saad;
Sarah-Mohammed;
[root@72c1d27a1b36 advance_command_lab]# cat names.csv | cut -d - tr ' '
cut: you must specify a list of bytes, characters, or fields
Try 'cut --help' for more information.
[root@72c1d27a1b36 advance_command_lab]# cat names.csv | cut -d - --outp
ut-delimiter=" "
cut: you must specify a list of bytes, characters, or fields
Try 'cut --help' for more information.
[root@72c1d27a1b36 advance_command_lab]# cat names.csv | cut -d - -f1 --
```

3. 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@72c1d27a1b36 advance_command_lab]# cat names.csv | cut -d- -f1,2 --output-delimiter=" " > full_name.csv
[root@72c1d27a1b36 advance_command_lab]# cat full_name.csv
Ali Ahmad;
Ali Khaled;
Waleed Fahad;
Noura Saad;
Sarah Mohammed;
[root@72c1d27a1b36 advance_command_lab]# cat names.csv | cut -d- --output-delimiter=" " > full_name.csv
cut: you must specify a list of bytes, characters, or fields
[root@72c1d27a1b36 advance_command_lab]# cat names.csv | cut -d- -f1,2 --output-delimiter=" " > full_name.csv
[root@72c1d27a1b36 advance_command_lab]# cat full_name.csv
Ali Ahmad;
Ali Khaled;
Waleed Fahad;
Noura Saad;
Sarah Mohammed;
[root@72c1d27a1b36 advance_command_lab]# cat names.csv
Ali-Ahmad;
Ali-Khaled;
Waleed-Fahad;
Noura-Saad;
Sarah-Mohammed;
[root@72c1d27a1b36 advance_command_lab]# cat full_name.csv
Ali Ahmad;
Ali Khaled;
Waleed Fahad;
Noura Saad;
Sarah Mohammed;
[root@72c1d27a1b36 advance_command_lab]#
```

- **Additional Challenge:**

1. 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.

```
Noura, 4, Dammam;
Sarah, 5, Dammam;
[root@72c1d27a1b36 advance_command_lab]# { echo ' Ali, 1, Dammam;'; echo ' Saad, 2, Dammam;'; echo ' Waleed, 3, Al-Dammam;'; echo ' Noura, 4, al-dammam;'; echo ' Sara
h, 5, al-dammam;'; } >> raw_data.csv;
[root@72c1d27a1b36 advance_command_lab]# sed -i 's/[^,]*/ Dammam;/3' raw_data.csv
[root@72c1d27a1b36 advance_command_lab]# cat raw_data.csv
Ali, 1, Dammam;
Saad, 2, Dammam;
Waleed, 3, Dammam;
Noura, 4, Dammam;
Sarah, 5, Dammam;
[root@72c1d27a1b36 advance_command_lab]# rm raw_data.csv
rm: remove regular file 'raw_data.csv'? y
[root@72c1d27a1b36 advance_command_lab]# { echo ' Ali, 1, Dammam;'; echo ' Saad, 2, Dammam;'; echo ' Waleed, 3, Al-Dammam;'; echo ' Noura, 4, al-dammam;'; echo ' Sara
h, 5, al-dammam;'; } >> raw_data.csv;
[root@72c1d27a1b36 advance_command_lab]# cat raw_data.csv
Ali, 1, Dammam;
Saad, 2, Dammam;
Waleed, 3, Al-Dammam;
Noura, 4, al-dammam;
Sarah, 5, al-dammam;
[root@72c1d27a1b36 advance_command_lab]# sed -i 's/[^,]*/ Dammam;/3' raw_data.csv
[root@72c1d27a1b36 advance_command_lab]# cat raw_data.csv
Ali, 1, Dammam;
Saad, 2, Dammam;
Waleed, 3, Dammam;
Noura, 4, Dammam;
Sarah, 5, Dammam;
[root@72c1d27a1b36 advance_command_lab]#
```