

Lab 8

Q1

Practice 1

```
1: Terminal
(rap@boxes) - [~] - Tue Nov 18 19:56:25 - [10.0.2.15]
$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin

2: Terminal
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
root:x:0:0:root:/root:/bin/bash
(rap@boxes) - [~] - Tue Nov 18 19:56:50 - [10.0.2.15]
$ tac /etc/passwd

3: Terminal
38  rap:x:1000:1000:rap,,,,:/home/rap:/bin/bash$
39  _flatpak:x:111:115:Flatpak system-wide installation helper:/nonexistent:
/usr/sbin/nologin$
(rap@boxes) - [~] - Tue Nov 18 19:57:38 - [10.0.2.15]
$ cat -nE /etc/passwd

4: Terminal
(rap@boxes) - [~] - Tue Nov 18 19:57:36 - [10.0.2.15]
$ tail -n 5 /etc/passwd
rtkit:x:108:112:RealtimeKit:/proc:/usr/sbin/nologin
colord:x:109:113:colord colour management daemon:/var/lib/colord:/usr/sbin/nologin
Debian-gdm:x:110:114:Gnome Display Manager:/var/lib/gdm3:/bin/false
rap:x:1000:1000:rap,,,,:/home/rap:/bin/bash
_flatpak:x:111:115:Flatpak system-wide installation helper:/nonexistent:/usr/sbin/nologin
(rap@boxes) - [~] - Tue Nov 18 19:58:06 - [10.0.2.15]
$ tail -1 /etc/passwd
_flatpak:x:111:115:Flatpak system-wide installation helper:/nonexistent:/usr/sbin/nologin
(rap@boxes) - [~] - Tue Nov 18 19:58:15 - [10.0.2.15]
$ head -1 /etc/passwd
root:x:0:0:root:/root:/bin/bash
(rap@boxes) - [~] - Tue Nov 18 19:58:20 - [10.0.2.15]
$ 
```

SEE YOU

Practice 2

The screenshot shows two terminal windows side-by-side. Both windows are titled "Tilix: Terminal".

Terminal 1 (Left):

```
(rap@boxes) - [~] - Tue Nov 18 19:59:07 - [10.0.2.15]
[$ cut -d":" -f1 /etc/passwd
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
www-data
backup
list
irc
_apt
nobody
systemd-network
dhcpcd
tss
systemd-timesync
messagebus
sshd
dnsmasq
avahi
speech-dispatcher
usbmux
cups-pk-helper
fwupd-refresh
geoclue
gnome-remote-desktop
saned
polkitd
rtkit
colord
Debian-gdm
rap
_flatpak
(rap@boxes) - [~] - Tue Nov 18 19:59:36 - [10.0.2.15]
[$ echo "You know what to do"
You know what to do
(rap@boxes) - [~] - Tue Nov 18 20:01:42 - [10.0.2.15]
[$ ]
```

Terminal 2 (Right):

```
(rap@boxes) - [~] - Tue Nov 18 20:00:13 - [10.0.2.15]
[$ cut -d":" -f1,6 /etc/passwd
root:/root
daemon:/usr/sbin
bin:/bin
sys:/dev
sync:/bin
games:/usr/games
man:/var/cache/man
lp:/var/spool/lpd
mail:/var/mail
news:/var/spool/news
uucp:/var/spool/uucp
proxy:/bin
www-data:/var/www
backup:/var/backups
list:/var/list
irc:/run/ircd
_apt:/nonexistent
nobody:/nonexistent
systemd-network:/
dhcpcd:/usr/lib/dhcpcd
tss:/var/lib/tpm
systemd-timesync:/
messagebus:/nonexistent
sshd:/run/sshd
dnsmasq:/var/lib/misc
avahi:/run/avahi-daemon
speech-dispatcher:/run/speech-dispatcher
usbmux:/var/lib/usbmux
cups-pk-helper:/nonexistent
fwupd-refresh:/var/lib/fwupd
geoclue:/var/lib/geoclue
gnome-remote-desktop:/var/lib/gnome-remote-desktop
saned:/var/lib/saned
polkitd:/
rtkit:/proc
colord:/var/lib/colord
Debian-gdm:/var/lib/gdm3
rap:/home/rap
_flatpak:/nonexistent
(rap@boxes) - [~] - Tue Nov 18 20:00:16 - [10.0.2.15]
[$ ]
```

A large watermark "SEE YOU SPACE" is visible across the bottom right of the terminal windows.

Practice 3

The terminal window shows a session on a Mac OS X system. The user is in their home directory (~) and has navigated to a folder named 'sample_files'. They run an 'ls' command to list files, then change into a 'Csv' subdirectory. Inside, they sort a 'cars.csv' file using 'sort -2' and pipe it to 'head -2' to show the first two rows. These rows represent car models and their details. The user then sorts the file again using 'sort -o sorted_cars.csv cars.csv' and counts the lines with 'wc -l', which shows 408 lines. Finally, they count the words with 'wc -m', which shows 22663 words. The terminal window has a dark theme with light-colored text and icons.

```
(rap@boxes) - [~/Documents/sample_files] - Tue Nov 18 20:03:10 - [10.0.2.15]
$ ls
Code Csv Html Json Markdown Txt
(rap@boxes) - [~/Documents/sample_files] - Tue Nov 18 20:03:36 - [10.0.2.15]
$ cd Csv/
(rap@boxes) - [~/Documents/sample_files/Csv] - Tue Nov 18 20:03:41 - [10.0.2.15]
$ sort cars.csv | head -2
AMC Ambassador Brougham;13.0;8;360.0;175.0;3821.;11.0;73;US
AMC Ambassador DPL;15.0;8;390.0;190.0;3850.;8.5;70;US
(rap@boxes) - [~/Documents/sample_files/Csv] - Tue Nov 18 20:03:50 - [10.0.2.15]
$ sort -o sorted_cars.csv cars.csv
(rap@boxes) - [~/Documents/sample_files/Csv] - Tue Nov 18 20:04:15 - [10.0.2.15]
$ ls
cars.csv cereal.csv contacts.csv country.csv fake_users.csv sorted_cars.csv
(rap@boxes) - [~/Documents/sample_files/Csv] - Tue Nov 18 20:04:17 - [10.0.2.15]
$ wc -l sorted_cars.csv
408 sorted_cars.csv
(rap@boxes) - [~/Documents/sample_files/Csv] - Tue Nov 18 20:04:31 - [10.0.2.15]
$ wc -m sorted_cars.csv
22663 sorted_cars.csv
(rap@boxes) - [~/Documents/sample_files/Csv] - Tue Nov 18 20:04:36 - [10.0.2.15]
$
```

SEE YOU SPACE

Q2

challenge 1

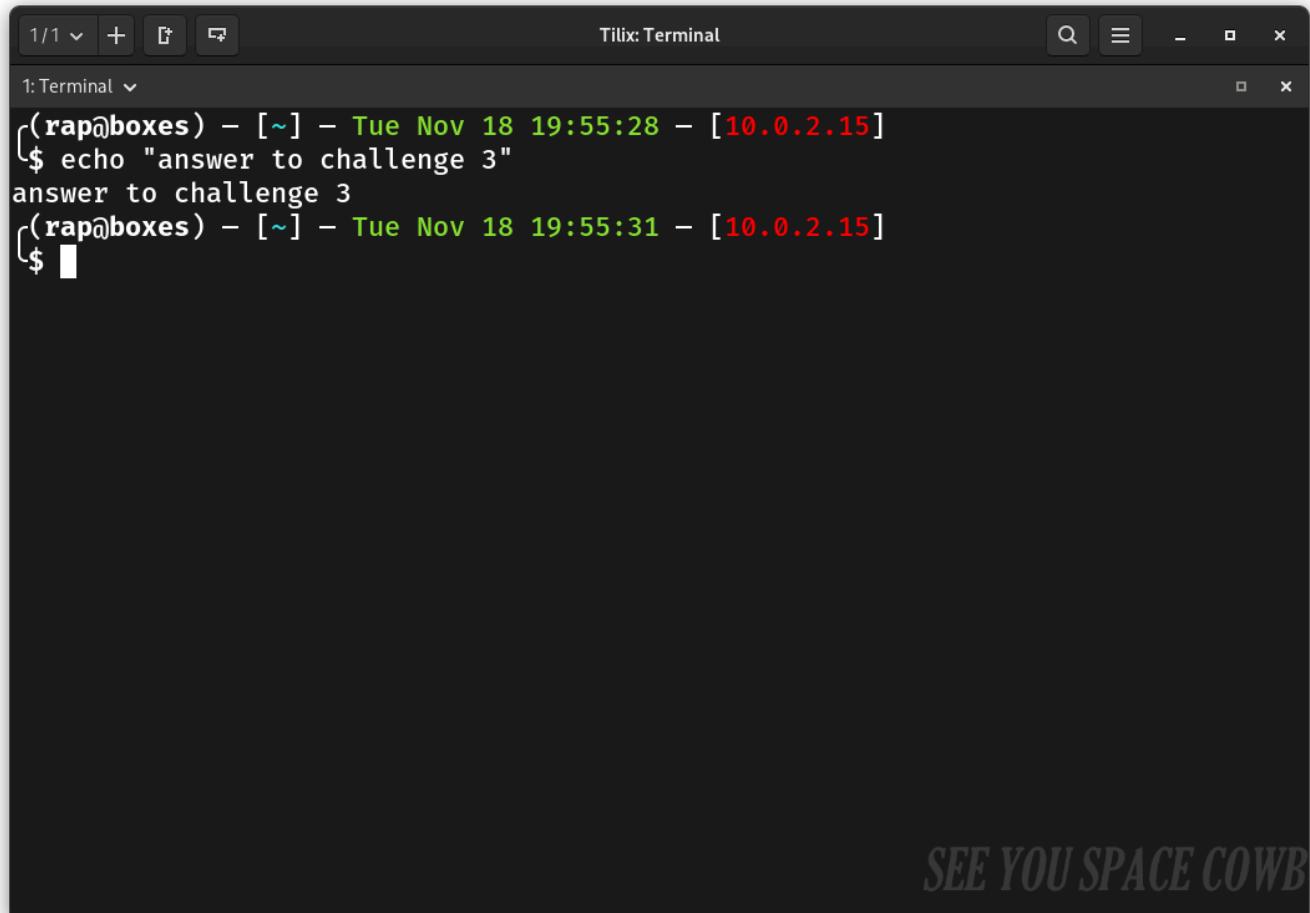
A screenshot of a terminal window titled "Tilix: Terminal". The terminal shows the following session:

```
(rap@boxes) ~ - Tue Nov 18 19:54:29 - [10.0.2.15]
$ echo "answer to challenge"
answer to challenge
(rap@boxes) ~ - Tue Nov 18 19:54:46 - [10.0.2.15]
$
```

The terminal has a dark background with light-colored text. The prompt "(rap@boxes) ~" appears twice, indicating a command loop or a bug. The date and time are shown in green. The command "echo" is used to print the string "answer to challenge". The terminal window has a standard Linux-style title bar with icons for minimize, maximize, and close.

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Challenge 2



A screenshot of a terminal window titled "Tilix: Terminal". The window shows a single terminal session with the following content:

```
(rap@boxes) ~ - Tue Nov 18 19:55:28 - [10.0.2.15]
$ echo "answer to challenge 3"
answer to challenge 3
(rap@boxes) ~ - Tue Nov 18 19:55:31 - [10.0.2.15]
$
```

The terminal window has a dark background with light-colored text. The title bar includes standard window controls (minimize, maximize, close) and the application name "Tilix: Terminal".

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Challenge 3

A screenshot of a terminal window titled "Tilix: Terminal". The window has a dark theme with light-colored text. It shows a single terminal session with the following content:

```
(rap@boxes) ~ - Tue Nov 18 19:55:11 - [10.0.2.15]
$ echo "answer to challenge 2"
answer to challenge 2
(rap@boxes) ~ - Tue Nov 18 19:55:13 - [10.0.2.15]
$
```

The terminal window has standard Linux-style window controls at the top right. A watermark or background image of a person's face is visible through the terminal window.

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