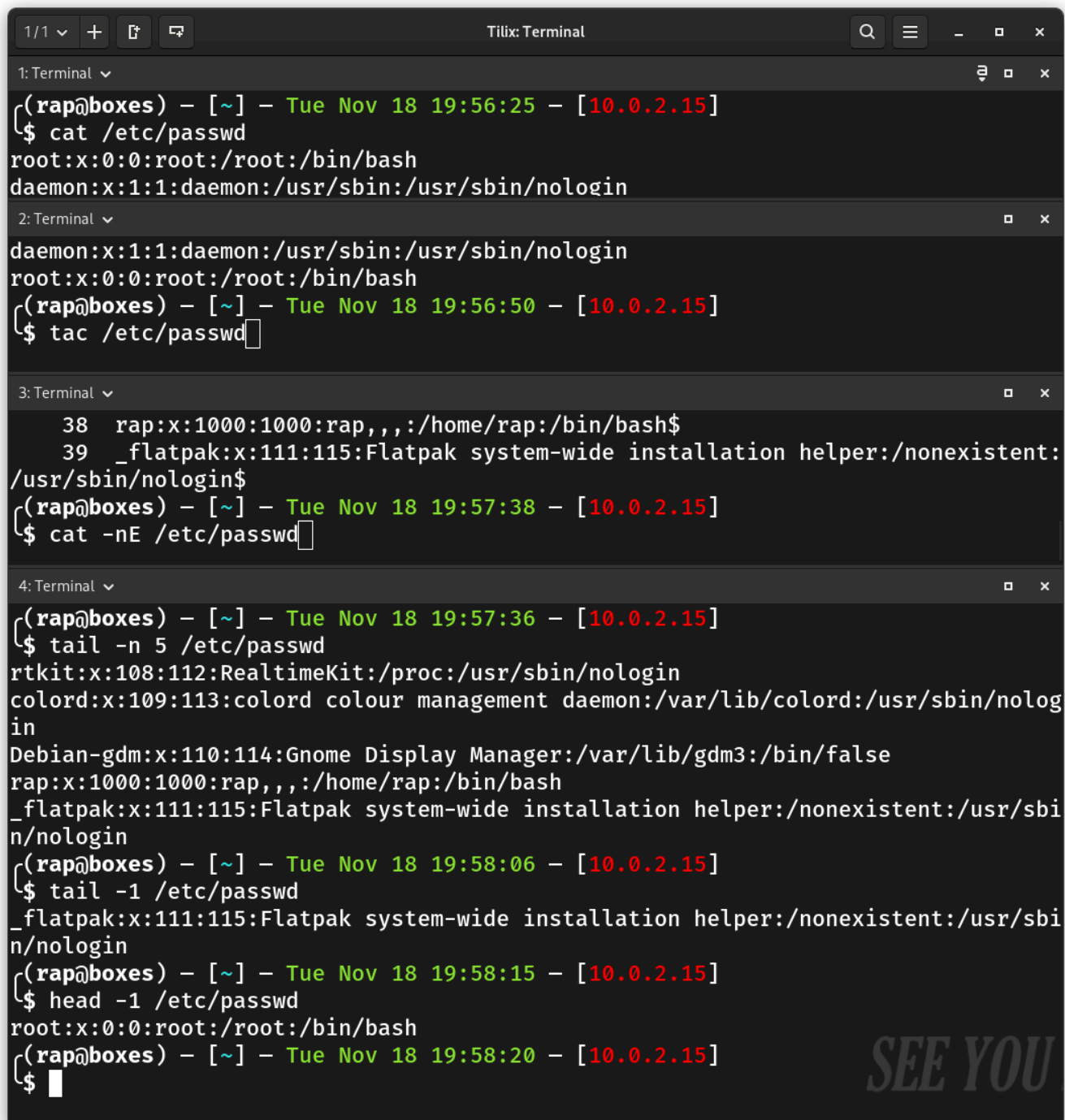


Lab 8

Q1

Practice 1



```
1/1 + [?] [?] Tilix: Terminal [Q] [≡] [-] [□] [×]

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

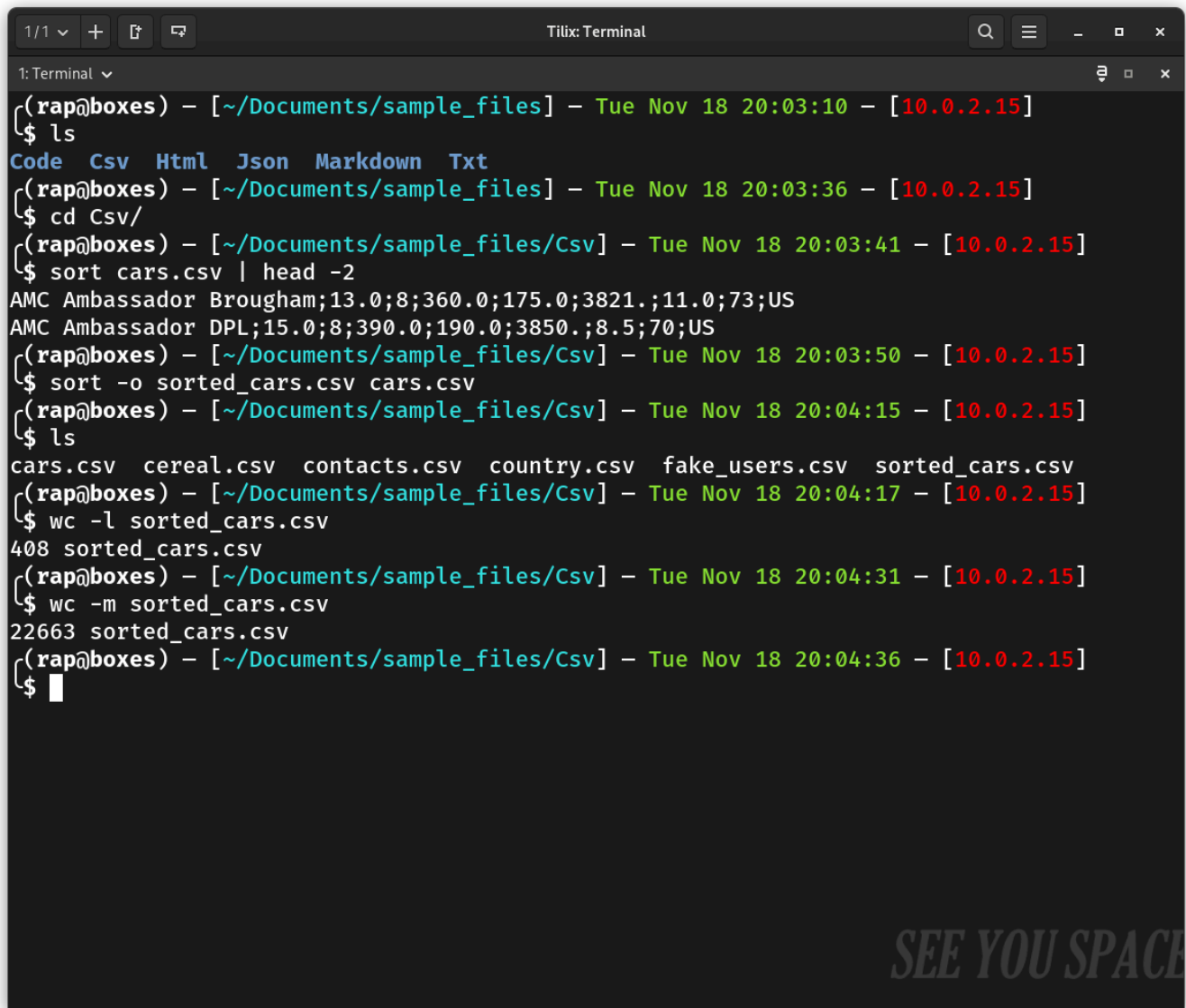
4: Terminal ▾ [□] [×]
(rap@boxes) - [~] - Tue Nov 18 19:57:36 - [10.0.2.15]
$ tail -n 5 /etc/passwd
rtkit:x:108:112:RealtimeKit:/proc:/usr/sbin/nologin
colord:x:109:113:colord colour management daemon:/var/lib/colord:/usr/sbin/nologin
Debian-gdm:x:110:114:Gnome Display Manager:/var/lib/gdm3:/bin/false
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]
$
```

Practice 2

```
1: Terminal 2: Terminal
(rap@boxes) - [~] - Tue Nov 18 19:59:07 - [10.0.2.15] (rap@boxes) - [~] - Tue Nov 18 20:00:13 - [10.0.2.15]
$ cut -d\":\" -f1 /etc/passwd $ 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/ssh
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 19:59:36 - [10.0.2.15] (rap@boxes) - [~] - Tue Nov 18 20:00:16 - [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]
$
```

SEE YOU SPACE

Practice 3

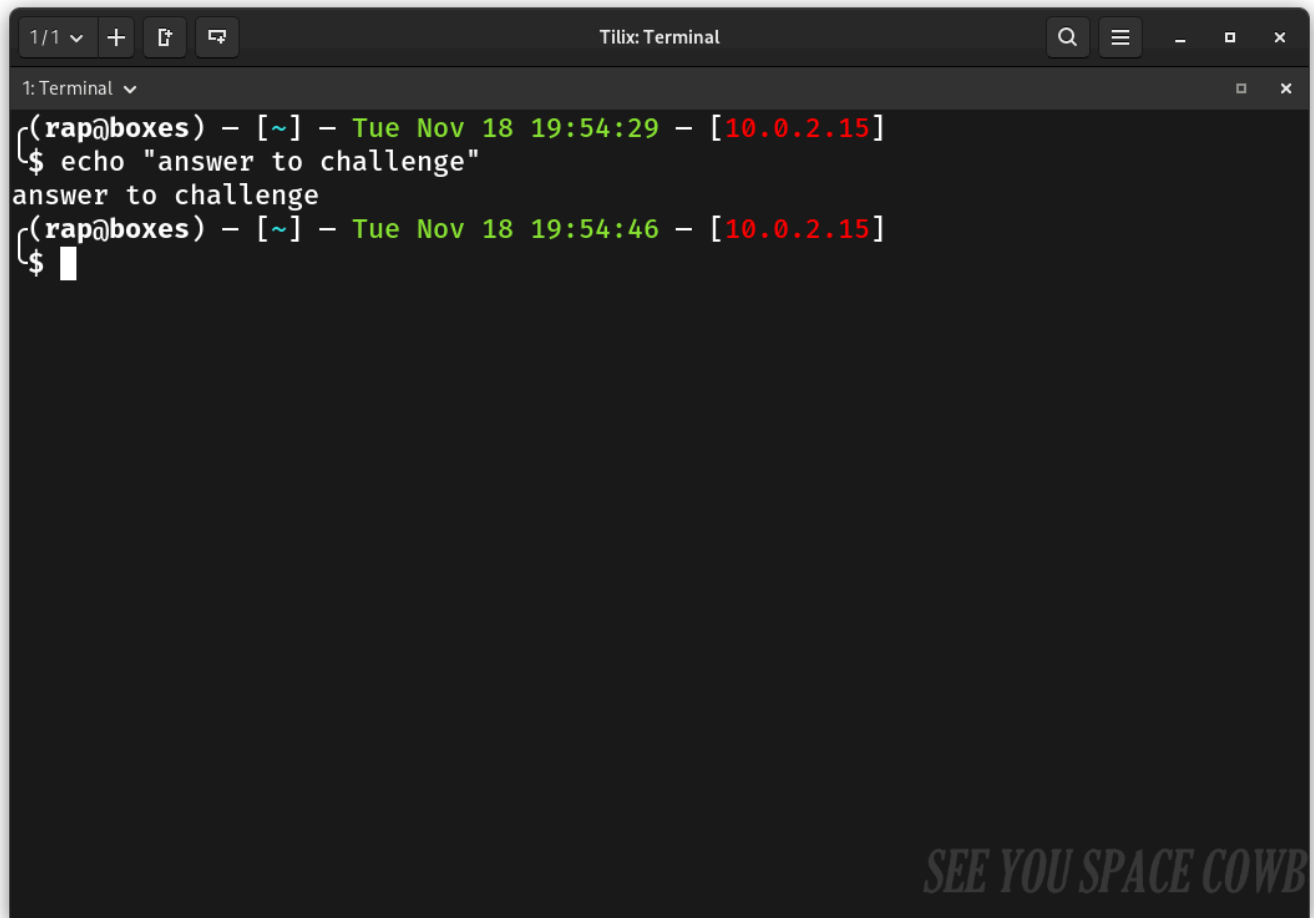


A terminal window titled 'Tilix: Terminal' showing a series of commands and their outputs. The user is in the directory ~/Documents/sample_files. The commands executed are: ls, cd Csv/, sort cars.csv | head -2, sort -o sorted_cars.csv cars.csv, ls, wc -l sorted_cars.csv, wc -m sorted_cars.csv. The output of sort cars.csv | head -2 shows two lines of car data. The output of wc -l sorted_cars.csv shows 408 lines. The output of wc -m sorted_cars.csv shows 22663 lines. The terminal window has a dark background with a 'SEE YOU SPACE' watermark in the bottom right corner.

```
(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]
$
```

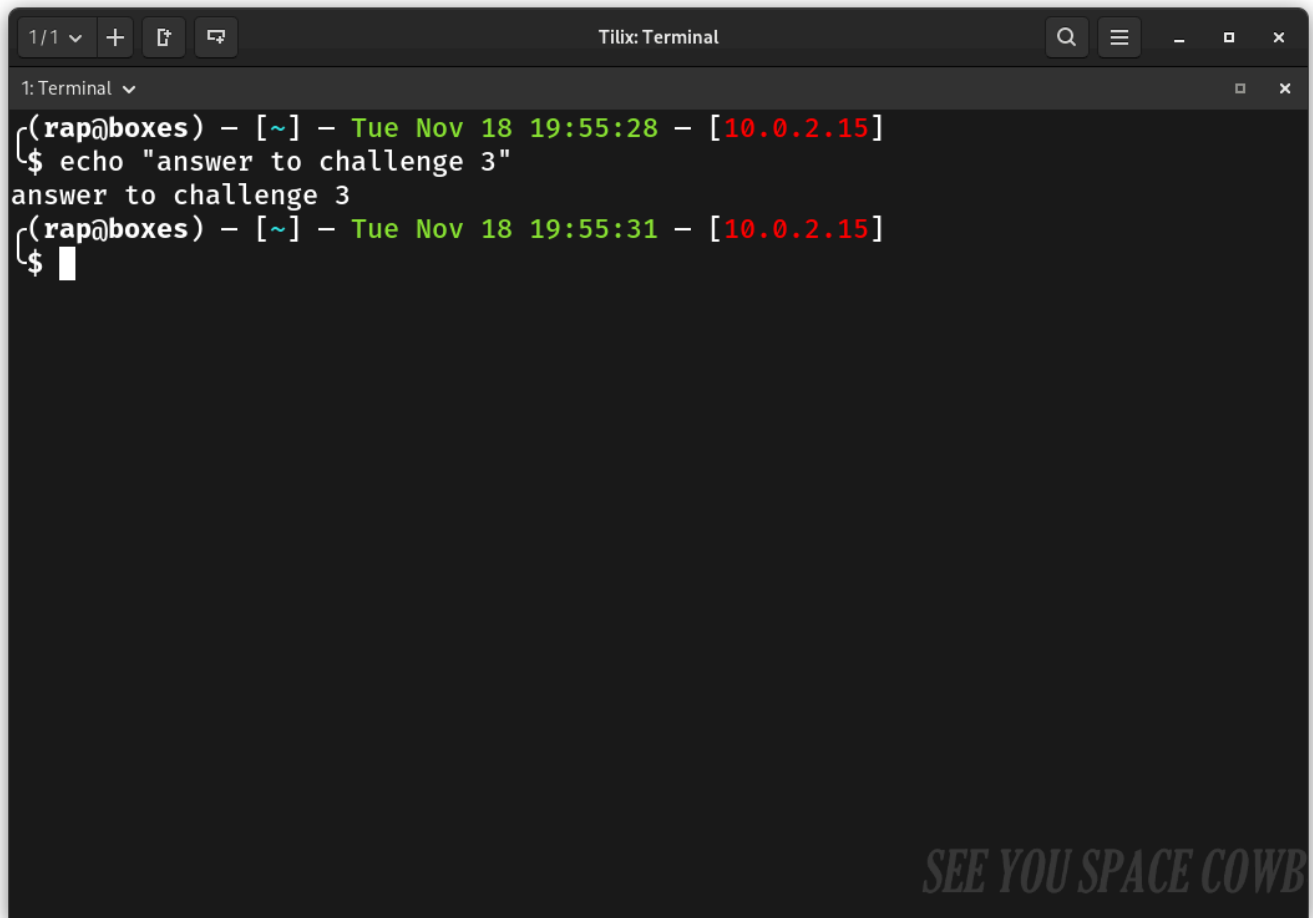
Q2

challenge 1

A screenshot of a terminal window titled "Tilix: Terminal". The terminal shows a shell prompt "(rap@boxes) - [~] - Tue Nov 18 19:54:29 - [10.0.2.15]". The user enters the command "\$ echo 'answer to challenge'", and the output is "answer to challenge". The prompt then updates to "(rap@boxes) - [~] - Tue Nov 18 19:54:46 - [10.0.2.15]". The user enters a dollar sign "\$" followed by a cursor. In the bottom right corner of the terminal, the text "SEE YOU SPACE COWB" is displayed in a stylized font.

```
1/1 + [ ] [ ] Tilix: Terminal [ ] [ ] [ ] [ ]  
1: Terminal [ ] [ ]  
(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]  
$ [ ]  
  
SEE YOU SPACE COWB
```

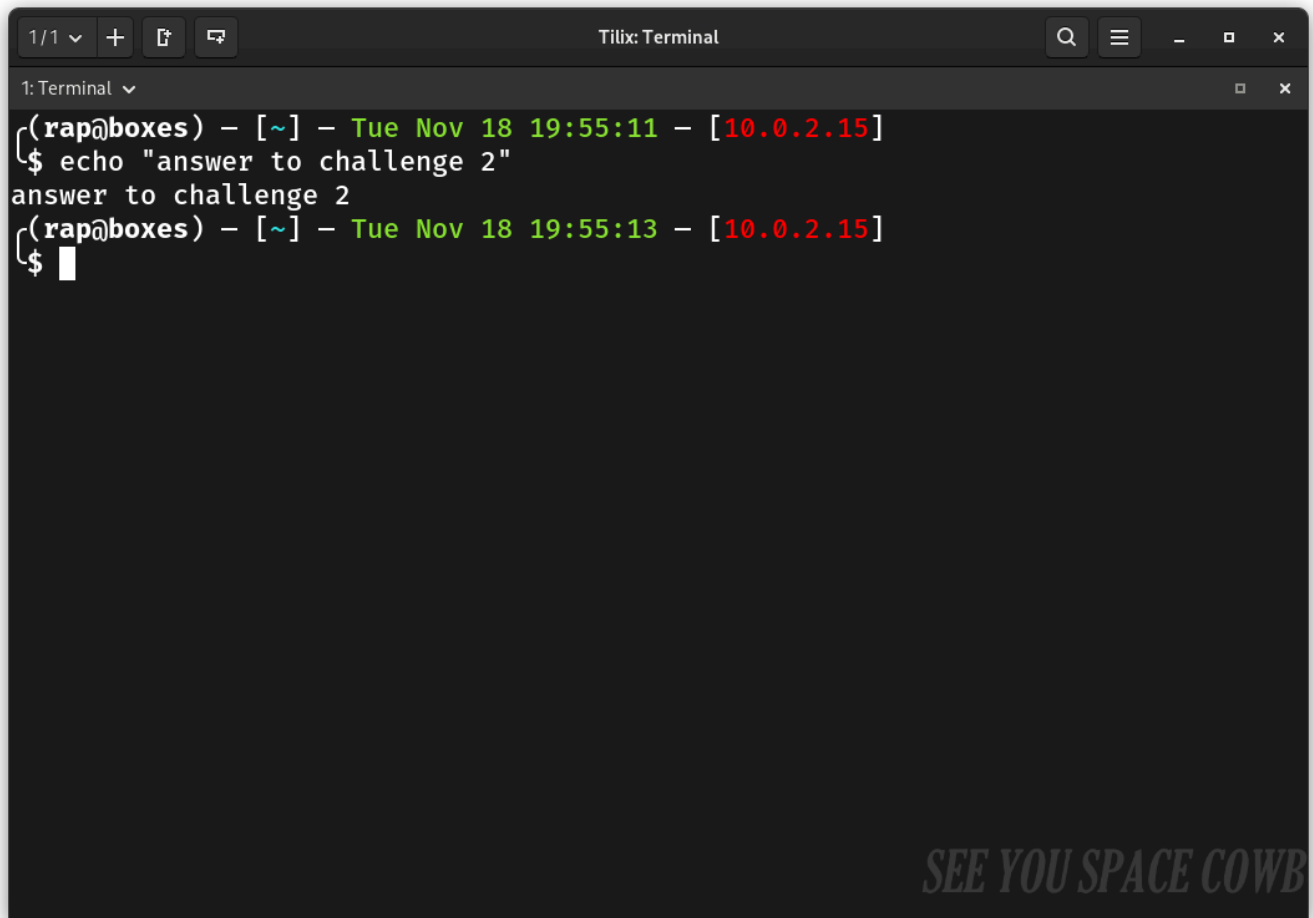
Challenge 2

A screenshot of a terminal window titled "Tilix: Terminal". The terminal shows a shell prompt "(rap@boxes) - [~] - Tue Nov 18 19:55:28 - [10.0.2.15]". The user enters the command "\$ echo 'answer to challenge 3'", and the output is "answer to challenge 3". The prompt then changes to "(rap@boxes) - [~] - Tue Nov 18 19:55:31 - [10.0.2.15]". The user enters a dollar sign "\$" followed by a cursor. In the bottom right corner of the terminal, the text "SEE YOU SPACE COWB" is displayed in a stylized font.

```
1/1 + [ ] [ ] Tilix: Terminal
1: Terminal
(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]
$
```

SEE YOU SPACE COWB

Challenge 3



A terminal window titled "Tilix: Terminal" with standard window controls. The terminal shows a shell session for user 'rap' on host 'boxes'. The prompt is '(rap@boxes) - [~] - Tue Nov 18 19:55:11 - [10.0.2.15]'. The user enters the command '\$ echo "answer to challenge 2"', and the output is 'answer to challenge 2'. The prompt then updates to 'Tue Nov 18 19:55:13 - [10.0.2.15]'. The user enters a dollar sign '\$' followed by a cursor. In the bottom right corner of the terminal, the text 'SEE YOU SPACE COWB' is displayed in a stylized, italicized font.

```
(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]
$
```

SEE YOU SPACE COWB