Question 1

For every command in this list, include the following:

Description formula/syntax 3 examples that you understand well

awk

awk used for processing and displaying text

awk + options + {awk command} + file + file to save

awk '{print $2,$3}' ~/Documents/Books/bible.txt

awk 'NR > 5 {print}' ~/Documents/Books?dracula.txt

awk '{print $NF}' ~/Documents/homework.txt

cat

cat is used fos displaying the content of a file

cat + option + File to display

cat -n bible.txt

cat -bn dracula.txt bible.txt

cat -s bible.txt

cp

cp c0pies files/directories from a source to a destination *cp + files to copy + destination*

cp Downloads/cars.txt Documents/

cp -r cis106/ Documents/Linux/

cp Downloads/* ~/pictures/

cut

cut extract a specific section of each line of a file and displaying it to the screen

cut + option + file

cut -b 1-10 bible.txt

cut -d ':' -f1,7 --output-delimiter=',' /etc/passwd

cut -d ':' --complement -s -f5 /etc/passwd/

grep

grep is used to search text in given file.

grep + option + search criteria + file

grep -c bin/bash /etc/passwd

grep amen ~/Documents/Books/bible.txt

grep -in 'dracula' ~/Documents/Books/dracula.txt

head

head displays the top N number of lines of a file by default prints 10 lines *head + option + file*

head ~/Documents/books/bible.txt

head -5 bible.txt

head dracula.txt

ls

-ls is used for listing the contend of a given directory.

ls + option + directory to list

ls -al /Downloads

ls -Ggh

ls -l --time-style=iso

man

mas describe commands, linux shell, executable programs, etc

man + comman

man ls

man pwd

man vim

mkdir

mkdir + name of the directory

-mkdir is used for create directories

mkdir ~/Downloads/games

mkdir -p ~/Wallpapers/Principal/cars

mkdir downloads/games wallpapers/cars music/rap

mv

-mv moves and renames directories

mv + source + destination mv + file/directory to rename + new name

mv Downloads/file1.txt Documents/

mv cars.txt toyota.txt

mv Downloads/file1.txt Downloads/file2.txt Documents/

tac

tac is used for displaying the content of a file in reverse mode

tac + option + file

tac -n bible.txt

tac -bn dracula.txt bible.txt

tac -s bible.txt

tail

tail is used for displaying the last 10 lines of a file

tail + option + file

tail ~/Documents/books/bible.txt

tail -5 bible.txt

tail dracula.txt

touch

touch + file name

-touch is used for creating files

touch Downloads/cars.txt Music/rap.mp3

touch ~/Videos/carlos.mp4

touch "carlos 9.txt"

tr

tr is used for translating or deleting characters from standard output

standard output | tr + option + set + set

cat file.txt | tr '.' ','

```
cat /etc/passwd | tr ':' '/'
```

```
cat bible.txt | tr "[:space:]" '\t'
```

tree

used for displaying the directory structure of a file system in a tree-like format.

tree + option + Directory

```
tree -a Documents/
```

```
tree -d Documents/
```

```
tree ~/Music/
```

How to work with multiple terminals open?

Using tilix there is and option to add terminals

How to work with manual pages?

Use man [command] to access the manual page for a command. for example *man ls*

How to parse (search) for specific words in the manual page

first initiated man then press '/' and type the word that you are looking for.

How to redirect output (> and |)

Using '>' will save the output of the command in a given file for example

ls > files.txt will write the output od ls inside od files.txt

Using '|' pass output as input to anoither command for example ls | grep "test" filters the output of ls for lines containig 'test'

How to append the output of a command to a file

Using >> we can append output for example echo 'new line' >> file.txt will add "new line" to the end of file.txt

How to use wildcards

cp ??*txt /destination/folder/ mv file[1-9]*.txt /destination/folder/

How to use brace expansion

Brace expansion is useful for creating complex directory structures efficiently. For example, mkdir -p project/{src,bin,docs/{html,pdf},tests} will create a project directory with subdirectories src, bin, docs (and further subdirectories html and pdf under docs), and tests