

Question 1

awk

- Description:
 - It is a scripting language to execute and displaying text by performing the operation line by line.
- Formula:
 - `awk + option + {awk command} + file`
- Examples:
 - `awk -F " " '{print $1}' dracula.txt`
 - `awk -F: '{print NR, $2, $10}' 78food.txt`
 - `awk -F: '{print toupper ($1)}' 78food.txt`

cat

- Description:
 - This is used to display the content of a file.
- Formula:
 - `cat + option + file`
- Examples:
 - `cat -n great-expectations.txt`
 - `cat -b great-expectations.txt`
 - `cat ~/Documents/Books/great-expectations.txt`

cp

- Description:
 - It is used to execute task as copying or changing the name of a file.
- Formula:
 - `cp + file + destination`
- Examples:
 - `cp -r Documents/Books/ ~/`
 - `cp ~/Documents/Csv/cars.csv ~/Desktop/`
 - `cp ~/Documents/Csv/cars.csv ~/Desktop/`

cut

- Description:
 - It support to extract a specific section of each line from a file.
- Formula:
 - `cut + option + file(s)`
- Examples:
 - `cut -d '.' -f1 pride-and-prejudice.txt`
 - `cut -b 1-10 dracula.txt`
 - `cut -d " " -f1,6 --output-delimiter "=" dracula.tx`

Grep

- Description:
 - It help to search text in a given file. It works lien by line.
- Formula:
 - `grep + option + search criteria + file (s)`
- Examples:
 - `grep "blood" dracula.txt`
 - `grep -i "god" dracula.txt`
 - `grep -v "dracula" dracula.txt`

head

- Description:
 - It display the top number of lines of a given file. The default line is 10.
- Formula:
 - `head + option + file`
- Examples:
 - `head dracula.txt`
 - `head -20 dracula.txt`
 - `head -50 dracula.txt`

ls

- Description:
 - It list the files and directories inside of a given directory.

- Formula:

- `ls + option + directory to list`

- Examples:

- `ls -a ~/Documents`
- `ls -lt ~/Downloads`
- `ls -x ~/Books`

man

- Description:

- It is use to see option and instructions of others commands.

- Formula:

- `man + option + command`

- Examples:

- `man -k file`
- `man ls`
- `man pwd`

mkdir

- Description:

- It is used to create one or multiples directories.

- Formula:

- `mkdir + new directory name or path + new directory name`

- Examples:

- `mkdir Photos /Backgrounds`
- `mkdir Photos/ Background1 Photos/ Background2 Photos/Background 3`
- `mkdir -p movies / series`

mv

- Description:

- It is used to remove or rename files and directory.

- Formula:

- `mv + source + destination`
- `mv + files or directory + new name`

- Examples:

- `mv Books/ dracula.txt/ Downloads`
- `sudo mv ~/Downloads/sample2.pdf /usr/share/`
- `mv great-expectations.txt great-expectations2.txt`

tac

- Description:
 - It support to display the content of a file in reverse order.
- Formula:
 - `tac + option + file to display`

- Examples:
 - `tac ~/Books/ great-expectation2.txt`
 - `tac ~/Downloads/sample2.doc`
 - `tac ~/Downloads/sample2.xls`

tail

- Description:
- It display the last number of lines of a given file. By default is print the last 10 lines.
- Formula:
 - `tail + option + file`
- Examples: `tail ~/Downloads /sample2.doc tac ~/Books/ great-expectation2.txt tac -60 ~/Books/ great-expectation2.txt`

touch

- Description:
 - It is used for creating files.
- Formula:
 - `touch + file name`
- Examples:
 - `touch movie list`
 - `touch list_movie.doc list_series.doc`
 - `touch "List of Employees.txt"`

tr

- Description:

- It is used to delete or change characters for a specific request.
- Formula:
 - standard output | tr + option + set + set
- Examples:
 - ``cat sample2.doc | tr "?" "!"`
 - `cat sample2.xls | tr ":" ",,"`
 - `cat movies | tr "." "!"`

tree

- Description:
 - It list all the directories with all their content including other directories and files.
- Formula:
 - `tree + option + directory`
- Examples:
 - `tree -d ~/Documents`
 - `tree -a ~/Books`
 - `tree -X ~/Downloads`

Question 2

How to work with multiple terminals open?

In the terminal window in the left corner , there is an option to open a second terminal.

How to work with manual pages?

Manual page can be work by using the formula `man + option + command to be search`. By executing this formula in the terminal it will display the instruction of how to work an specific command.

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

The way that we find a specific word is using the `-k` option with the `man` command. For example, `man -k ls`.

How to redirect output (> and |)

To redirect outputs from the terminal it is used `>` and by using `>>` it will work the same way but keeping the old data in the file. The `|` command will format the output with options to have a better look of the output.

How to append the output of a command to a file

To append or add more content to a file it is use `>>` after the command that we want to execute. For example, `ls -a >> files.txt`.

How to use wildcards

Wildcards are three signs: `*` It is used to substitute characters for a file name or extension to match anything after the wildcard.

`?` It substitutes specific amount of characters.

`[]` It matches a single character in the range.

For copying and moving multiple files at the same time

Copying multiples files at once can be done with formula `cp + option + files`. For example, `cp python.txt training.txt ~/Downloads`.

Moving multiple files at once can be done with formula `mv + option + file/directory`.

How to use brace expansion

The brace expansion is use to create files and directories as well as removing the same at one time. For example, `touch website{1..10}.html`

For creating entire directory structures in a single command

It can be perform by using formula `mkdir + -p + main-directory/{directory1,directory2}/{subdirectory1,subdirectory2}`.