

Notes 7

cat

- **Definition**
 - Used for displaying the content of a file.
- **Formula**
 - `cat + option + file(s) to display`
- **Examples**
 - Display the content of a file located in the pwd.
 - `cat todo.lst`
 - Display the content of a file using absolute path.
 - `cat ~/Documents/todo.lst`
 - Display the content of a file with line numbers excluding empty lines.
 - `cat -b ~/Documents/todo.md`

tac

- **Definition**
 - Used for displaying the content of a file in reverse order.
- **Formula**
 - `tac + option + file(s) to display`
- **Examples**
 - Display the content of a file located in the pwd.
 - `tac todo.md`
 - Display the content of a file using absolute path.
 - `tac ~/Documents/todo.md`
 - Display the content of a file with line numbers.
 - `tac -n ~/Documents/todo.md`

head

- **Definition**
 - Displays the top N number of lines of a given file.
- **Formula**
 - `head + option + file(s)`
- **Examples**
 - Display the first 10 lines of a file.
 - `head ~/Documents/Book/dracula.txt`
 - Display the first 5 lines of a file.
 - `head -5 ~/Documents/Book/dracula.txt`
 - Display the first line of multiple files using wildcards.
 - `head -n 1 *.csv *.py`

tail

- **Definition**

- Displays the last N number of lines of a given file.

- **Formula**

- `tail + option + file`

- **Examples**

- Display the last 10 lines of a file.
 - `tail ~/Documents/Book/dracula.txt`
- Display the last 5 lines of a file.
 - `tail -5 ~/Documents/Books/dracula.txt`
- Display the last 5 lines of multiple files.
 - `tail -n 5 dracula.txt bible.txt war-and-peace.txt`

cut

- **Definition**

- Used to extract a specific section of each line of a file and display it to the screen.

- **Formula**

- `cut + option + file(s)`

- **Examples**

- Display a list of all the users in your system.
 - `cut -d ':' -f1 /etc/passwd`
- Display a list of all the users in your system with their login shell.
 - `cut -d ':' -f1,7 /etc/passwd`
- Cut a range of bytes per line.
 - `cut -b 1-5 usernames.txt`

sort

- **Definition**

- Used for sorting files.

- **Formula**

- `sort + option + file`

- **Examples**

- Sort a file.
 - `sort users.lst`
- Sort a file and save the output to a new file.
 - `sort -o sorted.lst users.lst`
- Sort a file in reverse order.
 - `sort -r users.txt`

WC

- **Definition**

- Used for printing the number of lines.

- **Formula**

- `wc + option + file(s)`

- **Examples**

- Display the number of characters in a file.

- `wc -m users.txt`
- Display the number of lines in a file.
 - `wc -l users.txt`
- Display the number of words in a file.
 - `wc -w users.txt`

tr

- **Definition**
 - Used for translating or deleting characters from standard output.
- **Formula**
 - `Standard output | tr + option + set + set`
- **Examples**
 - Translate one character to another.
 - `cat file.txt | tr '.' ','`
 - Translate white space into tabs.
 - `cat file.py | tr -s "[:space:]" ' '`
 - Translate tabs into space.
 - `cat file.py | tr -s "[:space:]" '/t'`

diff

- **Definition**
 - Compares files and displays the difference between them.
- **Formula**
 - `diff + option + file1 + file2`
- **Examples**
 - Display the difference between two files.
 - `diff cars.csv cars-backup.csv`
 - Display the difference between two files in a column format.
 - `diff -y cars.csv cars-backup.csv`

grep

- **Definition ***
- **Formula ***
- **Examples ***