

Week Report 7

Commands

Cat

- What is the command used for?
 - The cat command is used for displaying the content of a file.
- What is the formula of the command?
 - The formula is : cat + option + file(s) to display
- Examples
 - example 1:
 - display the content of a file located in the pwd : cat todo.lst
 - example 2:
 - display the content of a file using absolute path : cat ~/Documents/todo.lst

Tac

- What is the command used for?
 - The tac command is used for displaying the content of a file in reverse order.
- What is the formula of the command?
 - The formula is : tac + option + file(s) to display
- Examples
 - example 1:
 - display the content of a file located in the pwd : tac todo.md
 - example 2:
 - display the content of a file using absolute path : tac ~/Documents/todo.md

Head

- What is the command used for?
 - The head command is used for displaying the top N number of lines of a given file.
- What is the formula of the command?
 - The formula is : head + option + file(s)
- Examples
 - example 1:
 - Display the first 10 lines of a file : head ~/Documents/Book/dracula.txt
 - example 2:
 - Display the first 5 lines of a file : head -5 ~/Documents/Book/dracula.txt

Tail

- What is the command used for?
 - The tail command is used for displaying the last N number of lines of a given file.
- What is the formula of the command?
 - tail + option + file
- Examples

- example 1:
 - Display the last 10 line of a file : `tail ~/Documents/Book/dracula.txt`
- example 2:
 - Display the last 5 lines of a file : `tail -5 ~/Documents/Book/dracula.txt`

Cut

- What is the command used for?
 - The cut command is used for extracting a specific section of each line of a file and display it to the screen.
- What is the formula of the command?
 - The formula is : `cut + option + file(s)`
- Examples
 - example 1:
 - Display a list of all the users in your system : `cut -d ':' -f1 /etc/passwd`
 - example 2:
 - Display a list of all the users in your system with their login shell : `cut -d ':' -f1,7 /etc/passwd`

Paste

- What is the command used for?
 - The paste command is used for joining files horizontally in columns.
- What is the formula of the command?
 - The formula is : `paste + options + files`
- Examples
 - example 1:
 - merge two files : `paste users.lst ip_address.lst`
 - example 2:
 - Merge two files using a different delimiter : `paste -d ":" users1.lst ip_addresses.lst`

Sort

- What is the command used for?
 - The sort command is used for sorting files.
- What is the formula of the command?
 - The formula is : `sort + option + file`
- Examples
 - example 1:
 - Sort a file : `sort users.lst`
 - example 2:
 - Sort a file in reverse order : `sort -r users.txt`

Wc

- What is the command used for?
 - The wc command is used for printing the number of lines, characters, and bytes in a file.
- What is the formula of the command?

- The formula is : `wc + option + file(s)`
- Examples
 - example 1:
 - Display the number of characters in a file : `wc -m users.txt`
 - example 2:
 - Display the number of lines in a file : `wc -l users.txt`

Tr

- What is the command used for?
 - The `tr` command is used for translating or deleting characters from standard output.
- What is the formula of the command?
 - The formula is : `Standard output | tr + option + set + set`
- Examples
 - example 1:
 - Translate white space into tabs : `cat program.py | tr "[:space:]" '\t'`
 - example 2:
 - Translate tabs into space : `cat file.py | tr -s "[:space:]" ' '`

Diff

- What is the command used for?
 - The `diff` command is used for comparing files and displays the differences between them.
- What is the formula of the command?
 - The formula is : `diff + option + file1 + file2`
- Examples
 - example 1:
 - Display the difference between two files : `diff cars.csv cars-backup.csv`
 - example 2:
 - Display the difference between two files in a column format : `diff -y cars.csv cars-backup.csv`

Grep

- What is the command used for?
 - The `grep` command is used for searching text in a given file.
- What is the formula of the command?
 - The formula is : `grep + option + search criteria + file(s)`
- Examples
 - example 1:
 - Search any line that contains the word "dracula" in the given file : `grep 'dracula' ~/Documents/dracula.txt`
 - example 2:
 - Search any line that contains the word "dracula" regardless of the case : `grep -i 'dracula' ~/Documents/Books/dracula.txt`

Awk

- What is the command used for?
 - Awk is a scripting language used for processing and displaying text.
- What is the formula of the command?
 - The formula is : awk + options + {awk command} + file + file to save (optional)
- Examples
 - example 1:
 - Print the first column of every line of a file : awk '{print \$1}' ~/Documents/Csv/cars.csv
 - example 2:
 - Print the first field of /etc/passwd file : awk -F: '{print \$1}' /etc/passwd
 - example 3:
 - Print the last field of the /etc/passwd file : awk -F '{print \$NF}' /etc/passwd
 - example 4:
 - Print the first and last field of the /etc/passwd : awk -F: '{print \$1,"=","\$NF}'
 - example 5:
 - Print the first and 3rd field with line numbers : awk -F: '{print NR,\$1,\$3}' /etc/passwd

Sed

- What is the command used for?
 - The sed command is a stream editor that performs operations on files and standard output.
- What is the formula of the command?
 - The formula is : sed options + sed script + file
- Examples
 - example 1:
 - Replacing a string in given file (replace pizza with rice) : sed 's/pizza/rice/' shopping-list.lst
 - example 2:
 - Replacing the number of occurrences of a pattern in a file : sed 's/pizza/rice/4' shopping-list.lst
 - example 3:
 - Replacing all the occurrences of the pattern in a file : sed 's/pizza/rice/g' shopping-list.lst
 - example 4:
 - Replacing string on a specific line number : sed '3 s/pizza/rice/' shopping-list.lst
 - example 5:
 - Replacing string on a range of lines : sed '1,3 s/pizza/rice/' shopping-list.lst