Notes 8

awk

Description

- The command is used for processing and displaying text.

Usage

- `awk` + `options` + `file` + `file to save (optional)`

Examples

- Print the first column of every line of a file:
  - `awk '{print $1}' ~/Documents/Csv/cars.csv`
- Print the first and last field of the /etc/passwd:
  - `awk -F: '{print $1," = ",$NF}' /etc/passwd`
- Print the first and 3 field with line numbers:
  - `awk -F: '{print NR,$1,$3}' /etc/passwd`

sed

Description

- The command is used to perform operations on files and standard output. We can find and replace, insert, and deletion. By using sed we can edit files without opening them.

Usage

- `sed options` + `sed script` + `file`

Examples

- Replacing a string in a given file (replace pizza for rice):
  - `sed 's/pizza/rice/' shopping-list.lst`
- To delete line from range x to y:
  - `sed '2,8d' shopping-list.lst`
- To delete from a given number to last line:
  - `sed '12,$d' shopping-list.lst`

less

Description

- Pager programs are used for reading files 1 page at a time. The 3 most common pager programs are "more", "less", and "most".

Usage

- `pager program` + `file to read`

Examples

- Displays the pages of the txt file dracula:
    - `less ~/Documents/Books/dracula.txt`
- Displays the pages of the txt file bible:
    - `more ~/Documents/Books/bible.txt`

>

Description

- In Linux, we can redirect the input and output of commands to and from files.

Usage

- `command output` + `>` + `file`

Examples

- Save the output of a command to a file:
    - `ls -lA ~ > all-files-in-home.txt`
- Save the error and success to the same file:
    - `ls -lA downloads/ Pictures &> alloutput.txt`
- Save the error to a file and success to another:
    - `ls -lA downloads/ Pictures > success.txt 2> error.txt`

>>

Description

- Append means to add more to a file instead of overwriting its content.If a file has any data prior executing the command, that data will be overwritten. To keep the old data we use >>.

Usage

- `command` + `>>` + `file being appended`

Examples

- To keep old data and add to existing file:
    - `ls -la >> allmyfiles.lst`

| (Pipe)

Description

- The pipe allows to redirect the standard output of a command to the standard input of another.

Usage

- `command_1` + `|` + `command_2` + `|` + `command_3` + `|` + `....` + `|` + `command_N`

Examples

- Use grep to look for a string in particular man page:
  - `man ls | grep "human-readable"`
- Display only the options of any command from its man page:
  - `man ls | grep "[[:space:]]*[[:punct:]]"`
- Display only the 2nd line in a file:
  - `head -2 file.lst | tail -1`

- `command_1` + `|` + `command_2` + `|` + `command_3` + `|` + `....` + `|` + `command_N`

Examples

- Use grep to look for a string in particular man page:
  - `man ls | grep "human-readable"`