

# awk

## Definition

A scripting language used for processing and displaying text. Awc can work with a text file or from standard output. Awk performs operations line by line.

## Usage

- `awk + options + {awk command} + file + file to save (optional)`

## Examples

- Print the first column of every line of a file
    - `awk "{print $1}" ~/Documents/Csv?cars.csv`
  - Print first field of /etc/passwd file
    - `awk -F: "{print $1}" /etc/passwd`
  - Print the last field of the /etc/passwd file
    - `awk -F: "{print $NF}" /etc/passwd`
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# sed

## Definition

A stream editor that perform operations on files and standard output. By using sed you can edit files without opening them

## Usage

- `sed options + sed script + file`

## Examples

- Replacing a string in given file (replace pizza for rice)
    - `sed 's/pizza/rice/' shopping-list.lst`
  - Replacing the number of occurrences of a patter in a file
    - `sed 's/pizza/rice/4' shopping-list.lst`
  - Replacing all the occurrence of the pattern in a file
    - `sed 's/pizza/rice/g' shopping-list.lst`
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# less

## Definition

a pager program that allows you to view text files one screen at a time

## Usage

- `less + file to read`

## Examples

- `less ~/Documents/Books/dracula.txt`
  - `less ~/Documents/file.txt`
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## alias

### Definition

A shorthand for a more complicated command. Alias don not persist unless you save them in your `.bashrc` or `.bash_aliases` file

### Usage

- `alias name_of_alias="command here"`

### Examples

- An alias to upgrade a linux (debian system):
  - `alias update="sudo apt update; sudo apt upgrade -y; sudo apt full-upgrade -y"`
- An alias to clean your system from unneeded packages
  - `alias clean="sudo apt autoremove -y; sudo apt autoclean; sudo apt purge;"`

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When using `>` on a file that already exists and contains data, it overwrites whatever is already inside the file

- `ls -ls > allmyfiles.lst`
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>>

If you want to keep old data you use `>>`

- `ls -ls >> allmyfiles.lst`

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Allows you to redirect the standard output of a command to the standard input of another

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