Notes 6: Handling files

Awk

Definition

is a scripting language used for processing text files. AWK supports almost if not all of the features of a programming language.

Usage:

```
awk 'pattern { action }' file
```

Example:

- Print the second column of a CSV file: `awk -F',' '{print $2}' data.csv`

Example:

- Filter lines containing a specific pattern `awk '/pattern/' file.txt`

Sed

Definition:

a stream editor that performs operations on files. Just like AWK, SED can be complex and tough to master however, as a Linux user you must at least be familiar with its basic functionality

Usage:

```
sed 's/old_text/new_text/' file
```

Example:

- Replace "foo" with "bar" in a file: `sed 's/foo/bar/' file.txt`
- Delete lines containing a specific pattern:
- `sed '/pattern/d' file.txt`

Less

Definition

a terminal pager program that allows you to view text files one page at a time. It provides navigation and search functionalities to easily scroll through large files.

Usage:

```
less file
```

Example:

- View the contents of a file: `less README.md`
- Search for a specific term within the file: `less large_file.log /search_term`

Alias

Definition

used to create shortcuts or abbreviations for longer commands. It allows you to define custom command aliases to simplify repetitive tasks or to create personalized shortcuts.

Usage:

`alias new_command='original_command'`

Example:

- Create an alias for listing files with detailed information `alias ll='ls -l'`
- Create an alias for navigating to a specific directory: `alias mydir='cd /path/to/my/directory'`