Debian Linux - Basics

Cursus

- **File Hierarchy System**
  - Directory Contents
  - Directory Structure
  - File Types
  - The mount command
    - Command Line Switches
  - The /etc/fstab file
    - Understanding the /etc/fstab file
      - Mountpoint Options
  - The umount command
    - Command Line Switches
  - Unix File Systems
    - Superblock
    - Inodes
    - Data Blocks
    - Hard (Physical) Links
    - Soft (Symbolic) Links
  - **Commands**: mount, umount.
- **The VIsual Editor**
  - Presentation

    - Creating, Opening and Closing files with VI
        - Commands
        - LAB #1 - Creating a new file with VI
        - LAB #2 - Opening a file in read-only mode using view
        - LAB #3 - Opening a file in read-write mode using VI
    - The set Command
        - Commands
        - LAB #4 - Turning on line numbering using set
    - Moving around within the file
        - Commands
    - Inserting Text
        - Commands
        - LAB #5 - Inserting text
    - Searching for Text
        - Commands
        - LAB #6 - Searching for and replacing text
    - Deleting Text
        - Commands
        - LAB #7 - Deleting lines
    - Copy, Cut and Paste
        - Commands
        - LAB #8 - Copying, Cutting and pasting text
    - Configuring a Personalised Interface
    - **Commands**: view, vi

- **Help and Documentation**
    - Help on external commands
    - Help on built-in commands
    - The man command
        - Command Line Switches
    - The apropos command
        - Command Line Switches
    - The makewhatis and whatis Commands under RHEL/CentOS 6
        - Command Line Switches

- The mandb and whatis commands with RHEL/CentOS 7
  - Command Line Switches
- The info command
  - Command Line Switches
- **Commands**: help, man, info, apropos, makewhatis, mandb, whatis.

- **Basic Shell Commands and Text Manipulation Tools**
  - Use of Basic Shell Commands
    - The stty Command
      - Command Line Switches
    - The date command
      - Command Line Switches
    - The who Command
      - Command Line Switches
    - The df Command
      - Command Line Switches
    - The free Command
      - Command Line Switches
    - The whoami Command
      - Command Line Switches
    - The pwd Command
      - Command Line Switches
    - The cd Command
      - Command Line Switches
    - The ls Command
      - Command Line Switches
    - The lsof Command
      - Command Line Switches
    - The touch Command
      - Command Line Switches
    - The echo Command
      - Command Line Switches
    - The cp Command
      - Command Line Switches

- The du Command
  - Command Line Switches
- The clear Command
- The exit Command
  - Command Line Switches
- The logout Command
  - Command Line Switches
- The sleep Command
  - Command Line Switches
- The wall Command
- The seq Command
  - Command Line Switches
- The screen Command
  - Command Line Switches

- Switches and Arguments
- Manipulating Text Files
  - Regular Expressions
    - BREs
    - EREs
  - Text-search Utilities
    - The grep Command
      - Command Line Switches
    - The egrep Command
      - Command Line Switches
    - The fgrep Command
    - LAB #1 - Using grep, egrep and fgrep
  - The Stream EDitor SED
    - Command Line Switches
    - LAB #2 - Using sed
  - The Text Processor AWK
    - Presentation
    - Field Separation
    - Conditions
      - A regular expression applied to a record

        - A regular expression applied to a field
        - Comparisons
        - Logical Operators
        - Built-in Variables
    - Awk Scripts
    - The printf function
    - Control Statements
        - if
        - for
        - while
        - do-while
    - Command Line Switches
    - LAB #3 - Using awk
- Other Useful Commands
  - The expand Command
    - Command Line Switches
  - La Commande unexpand
    - Command Line Switches
  - The cut command
    - Command Line Switches
  - The uniq Command
    - Command Line Switches
  - The tr Command
    - Command Line Switches
  - The paste Command
    - Command Line Switches
  - The split Command
    - Command Line Switches
  - The diff Command
    - Command Line Switches
  - The cmp Command
    - Command Line Switches
  - The patch Command
    - Command Line Switches

        - The strings Command
            - Command Line Switches
        - The comm Command
            - Command Line Switches
        - The head Command
            - Command Line Switches
        - The tail Command
            - Command Line Switches
        - LAB #4 - Use the grep, tr and cut to extract your IP address from the output of ifconfig
    - **Commands**: stty, date, who, df, free, whoami, pwd, cd, ls, touch, echo, cp, file, cat, mv, mkdir, rmdir, rm, sort, more, find, su, locate, updatedb, whereis, which, uptime, w, uname, du, lsmod, modprobe, rmmod, modinfo, clear, exit, logout, sleep, grep, egrep, fgrep, sed, awk, tr, paste, cut, split, diff, cmp, uniq, patch, strings, comm, od, head, tail, wall, screen.

- **Command Line Interface**
    - The Shell
    - /bin/bash
        - Internal And External Commands
        - Aliases
        - The Prompt
        - The history Command
        - The TAB key
        - Metacharacters
            - The * Metacharacter
            - The ? Metacharacter
            - The [] Metacharacter
            - The extglob Option
            - ?(expression)
            - *(expression)
            - +(expression)
            - @(expression)
            - !(expression)
        - Protecting Metacharacters
        - Exit Status
        - Redirections

        - Pipes
        - Command Substitution
        - Conditional Command Execution
    - Environment Variables
        - Principal Variables
        - Internationalisation and Localisation
        - Special Variables
        - The env Command
    - Bash Shell Options
        - noclobber
        - noglob
        - nounset
    - Basic Shell Scripting
        - Execution
        - The read command
            - Code de retour
            - The IFS Variable
        - The test Command
            - Testing Files
                - LAB #1
            - Testing Strings
                - LAB #2
            - Testing Numbers
                - LAB #3
            - Expressions
                - LAB #4
            - Testing the User Environment
                - LAB #5
        - The [[expression]] Command
            - LAB #6
        - Shell Operators
            - LAB #7
        - The expr Command
            - Maths

- Comparisons
- Logic
    - LAB #8
- The let Command
    - Maths
    - Comparisons
    - Logic
    - Binary
        - LAB #9
- Control Structures
    - If
    - case
    - Loops
        - for
        - while
            - Example
    - Start-up Scripts
    - LAB #10
        - ~~/.bash_profile
        - ~/.bashrc

- **Commands**: type, alias, unalias, chsh, history, wc, tee, set, vi, script, read, test, expr, let, if, case, for, while.