OPERATING SYSTEM 1

Lecture 3

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LINUX COMMANDS

Advance

Basic Linux Commands

1. man : **man**ual
   - The man command is short for manual and provides n depth information about the requested command or allows users to search for commands related to a particular keyword.
   - **Syntax:** man [-] [-k keywords] topic
     - **-** Displays the manual without stopping.
     - **-k** keywords Searches for keywords in all of the manuals available.
     - **Topic** Displays the manual for the topic or command typed in.
   - **Examples:**
     - man mkdir
     - man ls
   - **Note:** press ‘q’ to exist from man page.

Basic Linux Commands

2. more
   - Displays text one screen at a time.
   - **Syntax:** more [option] [file]
   - **Examples:**
     - more myfile.txt

Basic Linux Commands

3. touch
   - Change file access and modification time, it will create empty file if it's not exist.
   - **Syntax:** touch [option] [file]
   - **Examples:**
     - touch myfile.txt

Basic Linux Commands

4. vi
   - vi is a screen-oriented (visual) display editor.
   - **Syntax:** vi [filename]
   - Those option inside the vi screen
     - **i** start editing mode
     - **Esc** start command mode
     - **q** quit
     - **w** write
     - **wq** write and quit
     - **q!** discard and quit
   - **Examples:**
     - vi myfile.txt

Basic Linux Commands

5. date
   - Print the current time and date.
   - **Syntax:** date
   - **Examples:**
     - date
     - date > time.txt
     - more time.txt
     - date >> time.txt

Basic Linux Commands

6. cut
   - Cut out selected fields of each line of a file.
   - **Syntax:** cut [-f list][-d 'delimiter'] [file]
     - **-f2** copy the second field only
     - **-f1,7** copies the first and seventh field only
     - **-f3-6** copies fields from 3 to six
     - **-d 'delimiter'** separated by a delimiter character
   - **Examples:**
     - cut –f2 –d',' myfile.txt

Basic Linux Commands

7. pipe |
   - Called a pipeline, it allows you to pump the output of one program directly into another.
   - **Syntax:** |
   - **Examples:**
     - date — Mon Oct 22 09:12:34 EET 2012
     - date | cut –f2 –d' ' — Oct
     - date | cut –f4 –d' ' — 09:12:34
     - date | cut –f4 –d' ' | cut –f1 –d':' — 09

Basic Linux Commands

8. find
   - Finds one or more files assuming that you know their approximate filenames.
   - **Syntax:** find [PATH] –name 'filename' –type[f/d]
     - **PATH** Where to search
     - **-type f** Search for a file
     - **-type d** Search for a directory
   - **Examples:**
     - find /home –name '*.txt' –type f

Basic Linux Commands

9. grep
   - Finds text within a file.
   - **Syntax:** grep [options] [FILE]
     - **-c** Print a count of matching lines for each input file
     - **-n** Prefix each line of output with the line number within its input file
   - **Examples:**
     - grep 'ypu' myfile.txt
     - grep 'ypu' myfile.txt

Basic Linux Commands

10. wc : **w**ord **c**ount
    - wc displays a count of lines, words, and characters in a file.
    - **Syntax:** wc [-c][-w][-l] [FILE]
        - **-c** Count characters
        - **-w** Count words
        - **-l** Count lines
    - **Examples:**
        - wc -l /home/ypu/myfile.txt

Basic Linux Commands

11. poweroff
    - Sends a signal which instructs the system to power down.
    - **Syntax:** poweroff
    - **Examples:**
        - poweroff

Basic Linux Commands

12. exit
    - Issuing the exit command at the shell prompt will cause the shell to exit.
    - **Syntax:** exit
    - **Examples:**
        - exit

Basic Linux Commands

13. whoami
    - It is used to find out the current user of the terminal.
    - **Syntax:** whoami
    - **Examples:**
        - whoami

Basic Linux Commands

14. sudo
    - It allows a permitted user to execute a command as the super user or another user.

Basic Linux Commands

15. su
    - It is used to run shell with substitute user and group IDs.
    - It helps to change login session's owner without the owner having to first logout of that session.
    - **Syntax:** su user
    - **Example:**
        - su user1

Basic Linux Commands

16. expr
    - Evaluates an expression and outputs the corresponding value.
    - **Example:**
        - expr 3 + 2 - 1
        - expr \(3 + 4 - 1 \)
        - expr \(3 + 4 - 1 \) * 7
        - expr \(3 + 4 - 1 \) * 7
        - expr \(3 + 4 - 1 \) / 4

Exercise

1. Go to the home directory.
2. Fetch all files and folders.
3. Cut owners for these files.
4. Save them in new file ‘out.txt’.
5. Print how many files and folders found in ‘out.txt’ (the count).
6. Search for how many files and folders “Lab2” user own (is owner to).