

## INFORMATION TECHNOLOGY EDUCATION DEPARTMENT

**IOS 102 LAB**

**(Operating Systems Laboratory)**

**<LABORATORY SCHEDULE>**

EXERCISE

4

**Linux Directory and File Creation Commands**

**(Part 2)**

<STUDENT NAME 1>

<STUDENT NAME 2>

DATE

**Experiment No. 4: Files and Directories Part 2**

**INTRODUCTION**

The standard of the Linux file system consists of a set of guidelines and requirements for file and directory placement. These guidelines are intended to support interoperability of applications, system administration tools, development tools and scripts as well as greater uniformity in documentation.

***Note: Save this file as surname1\_surname2\_expt4.docx***

The following are the general terminologies and concepts used in Linux operating system:

* PARTITION. This is a logical division of a hard disk created so that you can have different operating system on the same hard disk, or to create the impression of having separate hard drives for file management, multiple users or other purposes.
* FILESYSTEM. This refers to the way in which file are named and where they are placed logically for storage and retrieval.
* ABSOLUTE AND RELATIVE PATH. The highest directory in the Linux directory tree is the /. To go from one path to the other, we can always start from the top (/) to the directory where we want to go (absolute), or specify the path from our current location to the directory where we want to go (relative).
* AUTOCOMPLETE, WILDCARDS. Autocomplete works on files and directories. Just press Tab to complete the directory or file that you are looking for. Wildcards only work on files. Wildcards such as \*, ., ?, ~, .., are the ones used in Linux system
* LINUX FILENAMES. Linux allows filenames to be up to 256 characters long. These characters can be lower and upper case letters, numbers, and other characters, usually the dash (-), the underscore (\_), and the dot (.). Linux filenames do not follow the concept of file extensions as in DOS. IN other words, period or dot (.) is just like an ordinary character. A filename preceded by a dot (.) will become a hidden file. Also, Linux filenames are case sensitive, unlike in DOS or Windows.

**I. Objectives:**

* To create ordinary file and hidden file in Linux.
* To display the content of a directory containing both ordinary and hidden files.
* To display the list of files using the different wildcard characters
* To display the list of files/directories using the Autocomplete (Tab) key

**II. Tasks / Procedure / Instructions:**

**Creating empty files in Linux:**

**Ordinary file -> touch file1 (this command will lead to the creation of a file named file1)**

**Hidden file -> touch .file2 (this will lead to the creation of the file named .file2)**

**Creating directory in Linux:**

***Syntax:***

**mkdir directoryname**

***Example:***

**mkdir folder1 (this command to the creation of a directory named folder1)**

**Part I. Create ordinary and hidden file in Linux.**

1. Go inside your home directory.

Paste your captured executed command below.

2. Create a directory named ***LabExer4***.

Paste your captured executed command below.

3. Inside the ***LabExer4*** directory, create the following files using touch command:

file1, file2, file3, file12, file13, file14, filea, fileb.

Paste your captured executed command below.

4. Also, inside the ***LabExer4*** directory, create the hidden files **.doc1**, **.doc2**, **.doc3**

Paste your captured executed command below.

**Part II. Create ordinary and hidden file in Linux.**

5. Using the ls command, display the content of the directory ***LabExer4.***

Paste your captured executed command and output below.

6. Using the ls –a command, display the content of the directory ***LabExer4.***

Paste your captured executed command and output below.

7. What does the ‘-a’ option in the ls command indicate?

**Answer:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part III. Display the list of files using the different wildcard characters.**

8. Using the command ‘ls file\*’, display the content of the directory LabExer4.

Paste your captured executed command and output below.

9. Using the command ‘ls file??’, display the content of the directory LabExer4.

Paste your captured executed command and output below.

10. Using the command ‘ls file[123]’, display the content of the directory LabExer4.

Paste your captured executed command and output below.

11. Using the command ‘ls file[1-3a-b]’, display the content of the directory LabExer4.

Paste your captured executed command and output below.

12. Using the command ‘ls file[1][2-4]’, display the content of the directory LabExer4.

Paste your captured executed command and output below.

**Part IV. Display the list of files/directories using the AUTOCOMPLETE (TAB) key.**

13. Using the command ‘ls fi[tab]’, the characters fi will be completed into what word?

**Answer:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part V. Challenge**

I. Create the following files in a subdirectory named ***LabExer4\_challenge*** (to be created) inside you***r LabExer4*** directory:

.smart chant4a.doc docuxy.txt

.globe chant5b.doc docu12.doc

.touch chant6c.doc docu45.txt

.sun chant.doc text1.x

Chantab filea1.doc text2.y

Chantbc fileb2.doc text3

Chantcd filec1.txt text4.1

chant12 filea2.txt file1.x

chant23 fileb1.doc chant34

filec2.txt

1. Write the command that will cause all the files to be displayed including .smart, .globe, .touch, and .sun.

Paste your captured executed command and output below.

2. Write the command that will cause the files Chantab, Chantbc, Chantcd, chant12, chant23, and chant34 to be displayed. Make use of wildcard characters.

Paste your captured executed command and output below.

3. Write the command that will display the files chant4a.doc, chant5b.doc, chant6c.doc, and chant.doc.

Make use of wildcard characters.

Paste your captured executed command and output below.

4. Write the command that will display the files filea1.doc, fileb2.doc, filec1.txt, filea2.txt, fileb1.doc, filec2.txt.

Make use of wildcard characters.

Paste your captured executed command and output below.

5. Write the command that will cause the files docuxy.txt, docu12.doc, docu45.txt to be displayed.

Make use of wildcard characters.

Paste your captured executed command and output below.

**Observation:**

**Conclusion:**