

OPERATING SYSTEM LABORATORY MANUAL



UNIVERSITY OF THE PUNJAB

**FACULTY OF COMPUTING & INFORMATION TECHNOLOGY, LAHORE
DEPARTMENT OF COMPUTER SCIENCE**

Course:	Operating System Lab	Date:
Course Code:	CC-217-3L	Max Marks: 40
Faculty/Instructor's Name & Email:	Dr. Ahmad Hassan Butt (ahmad.hassan@pucit.edu.pk)	

**LAB MANUAL # 3
(SPRING 2023)**

Name: _____ Enroll No: _____

Objective(s) :

To study and execute the commands in Linux.

Lab Tasks :

Task 1 : Execute the Date Commands and write the output.

Task 2: Execute the below mentioned LINUX Commands and generate output.

Task 3 : Execute the below File Commands and write the output.

Task 4 : Execute FILTERS AND PIPES commands and write the output

Lab Grading Sheet :

Task	Max Marks	Obtained Marks	Comments(<i>if any</i>)
1.	10		
2.	10		
3.	10		
4.	10		
Total	40		Signature

Note : Attempt all tasks and get them checked by your Instructor

Lab 03: LINUX Commands

Objective(s):

- To study and execute the commands in Linux.

Tool(s) used:

Ubuntu

General Purpose utility LINUX Commands

Task 01 Execute the Date Commands and write the output.

This command is used to display the current date and time.

Syntax: \$date

Output:

Options:

a = Abbreviated weekday.
A = Full weekday.
b = Abbreviated month.
B = Full month.
c = Current day and time.
C = Display the century as a decimal number.
d = Day of the month.
D = Day in “mm/dd/yy” format
h = Abbreviated month day.
H = Display the hour.
m = Month of the year.
M = Minute.
P = Display AM or PM
S = Seconds
T = HH:MM:SS format
y = Display the year in 2 digit.
Y = Display the full year.
Z = Time zone.

To change the format:

Syntax: \$date +%H-%M-%S

Output:

Calendar Command

This command is used to display the calendar of the year or the particular month of calendar year.

Syntax

\$cal year

\$cal month year

Here the first syntax gives the entire calendar for given year & the second Syntax gives the calendar of reserved month of that year.

Output:

Task 02 Execute the below mentioned LINUX Commands and generate output.

Echo Command

This command is used to print the arguments on the screen.

Syntax: \$echo text

Output:

Banner Command

It is used to display the arguments in „#“ symbol.

Syntax: \$banner <arguments>

Output:

‘ who’ Command

It is used to display who are the users connected to our computer currently.

Syntax: \$who – option’s

Options

- H–Display the output with headers.
- b–Display the last booting date or time or when the system was lastly rebooted.

Output:

'whoami' Command

Display the details of the current working directory.

Syntax: \$whoami

Output:

'Binary' Calculator Command

It will change the „\$“ mode and in the new mode, arithmetic operations such as +,- ,*,/,%,n,sqrt(),length(),=, etc can be performed. This command is used to go to the binary calculus mode.

Syntax: \$bc operations ^d

- 1 base – input base
- 0 base – output base are used for base conversions.
- Base: Decimal = 1 Binary = 2 Octal = 8 Hexa = 16

Output:

'CLEAR' Command

It is used to clear the screen.

Syntax: \$clear

Task 03 Execute the below File Commands and write the output.

Create a File

To create a new file in the current directory we use CAT command.

Syntax:

\$cat > filename.

The > symbol is re-directory we use cat command.

Output:

Display A File

To display the content of file mentioned we use CAT command without “>” operator.

Syntax:

\$cat <filename.

Options -s = to neglect the warning /error message.

Output:

Copying Contents

To copy the content of one file with another. If file does not exist, a new file is created and if the file exists with some data then it is appended.

Syntax:

\$ cat source filename >> destination filename it is to avoid overwriting.

Options: -n content of file with numbers included with blank lines.

Syntax: \$cat -n filename

Output:**Copying Contents From One File To Another**

To copy the contents from source to destination file. so that both contents are same.

Syntax

\$cp source filename destination filename

Output:**MOVE Command**

To completely move the contents from source file to destination file and to remove the source file.

Syntax: \$ mv source filename destination filename

Output:**REMOVE Command**

To permanently remove the file we use this command.

Syntax: \$rm filename

Output:

WORD Command

To list the content count of no of lines, words, characters.

Syntax: \$wc filename

Options:

- -c – to display no of characters. -l – to display only the lines.
- -w – to display the no of words.

Output:

PAGE Command

This command is used to display the contents of the file page wise & next page can be viewed by pressing the enter key.

Syntax: \$pg filename

Output:

Task 04 Execute FILTERS AND PIPES commands and write the output

HEAD

It is used to display the top ten lines of file.

Syntax: \$head filename

Output:

TAIL

This command is used to display the last ten lines of file.

Syntax: \$tail filename

Output:

SORT

This command is used to sort the data's in some order.

Syntax: \$sort filename

Output:

PIPE

It is a mechanism by which the output of one command can be channeled into the input of another command.

Syntax: echo 1+1|bc

Output:

TR

The tr filter is used to translate one set of characters from the standard inputs to another.

Syntax: \$tr “[a-z]” “[A-Z]”

Output: