

Experiment No. 1

1. Basics of UNIX commands.

COMMAND :

1.Date Command :

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

Syntax :

\$date
\$date +%ch

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.
L = Day of the year.
m = Month of the year.
M = Minute.
P = Display AM or PM
S = Seconds
T = HH:MM:SS format
u = Week of the year.
y = Display the year in 2 digit.
Y = Display the full year.
Z = Time zone .
To change the format:

Syntax:

\$date „+%H-%M-%S“

2. Calender Command :

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

Syntax:

a.\$cal <year>
b.\$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.

3. Echo Command:

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

Syntax: \$echo <text>

Multi line echo command:

To have the output in the same line , the following commands can be used.

Syntax: \$echo <text\>text

To have the output in different line, the following command can be used.

Syntax: \$echo "text
 >line2
 >line3"

4. Banner Command:

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

Syntax: \$banner <arguments>

5.'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 lastely rebooted.

6.'who am i' Command:

Display the details of the current working directory.

Syntax: \$who am i

7.'tty' Command:

It will display the terminal name.

Syntax: \$tty

8.'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 –inputbase

 0 base – outputbase are used for base conversions.

Base:

 Decimal = 1 Binary = 2 Octal = 8 Hexa = 16

9.'CLEAR' Command:

It is used to clear the screen.

Syntax: \$clear

10.'MAN' Command:

It help us to know about the particular command and its options & working. It is like „help" command in windows .

Syntax: \$man <command name>

11. Manipulation Command:

It is used to manipulate the screen.

Syntax: \$tput <argument>

Arguments:

1. Clear – to clear the screen.
2. Longname – Display the complete name of the terminal.
3. SMSO – background become white and foreground become black color.
4. rmso – background become black and foreground becomes white color.
5. Cop R C – Move to the cursor position to the specified location.
6. Cols – Display the number of columns in our terminals.

12. LIST Command :

It is used to list all the contents in the current working directory.

Syntax: \$ ls – options <arguments>

If the command does not contain any argument means it is working in the Current directory.

Options:

- a– used to list all the files including the hidden files.
- c– list all the files columnwise.
- d- list all the directories.
- m- list the files separated by commas.
- p- list files include „/“ to all the directories.
- r- list the files in reverse alphabetical order.
- f- list the files based on the list modification date.
- x-list in column wise sorted order.

DIRECTORY RELATED COMMANDS:

1. Present Working Directory Command:

To print the complete path of the current working directory.

Syntax: \$pwd

2. MKDIR Command:

To create or make a new directory in a current directory.

Syntax: \$mkdir <directory name>

3. CD Command:

To change or move the directory to the mentioned directory.

Syntax: \$cd <directory name>

4. RMDIR Command:

To remove a directory in the current directory & not the current directory itself.

Syntax: \$rmdir <directory name>

FILE RELATED COMMANDS:

1. CREATE A FILE:

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

Syntax:

```
$cat > <filename.
```

The > symbol is redirectory we use cat command.

2. 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.

3. COPYING CONTENTS:

To copy the content of one file with another. If file doesnot exist, a new file is created and if the file exists with some data then it is overwritten.

Syntax:

```
$ cat <filename source> >> <destination filename>
```

```
$ cat <source filename> >> <destination filename> it is avoid overwriting.
```

Options: -

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

Syntax:

```
$cat -n <filename>
```

4. SORTING A FILE:

To sort the contents in alphabetical order in reverse order.

Syntax:

```
$sort <filename >
```

Option:

```
$ sort -r <filename>
```

5. 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>
```

```
$cp <source filename path > <destination filename path>
```

6. 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>
```

7. REMOVE Command :

To permanently remove the file we use this command.

Syntax:

```
$rm <filename>
```

8. 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.

9. LINE PRINTER:

To print the line through the printer, we use lp command.

Syntax:

\$lp <filename>

10. 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>

11. FILTERS AND PIPES

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

Syntax: \$head<filename>

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

Syntax: \$tail<filename>

PAGE: This command shows the page by page a screenfull of information is displayed after which the page command displays a prompt and passes for the user to strike the enter key to continue scrolling.

Syntax: \$ls -a\p

MORE: It also displays the file page by page .To continue scrolling with more command , press the space bar key.

Syntax: \$more<filename>

GREP: This command is used to search and print the specified patterns from the file.

Syntax: \$grep [option] pattern <filename>

SORT: This command is used to sort the datas in some order.

Syntax: \$sort<filename>

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

Syntax: \$who | wc-l

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

Syntax: \$tr "[a-z]" "[A-Z]"