**Working with a Vi Editor:**

1: Create a file using vi. Enter the following text:

A network is a group of computers that can communicate with each other, share

resources, and access remote hosts or other networks. Netware is a computer network

operating system designed to connect, manage, and maintain a network and its

services. Some of the network services are Netware Directory Services (NDS), file

system, printing and security. **: vi network.txt – creating a new file in vi editor**

**i ---- to enter insert mode and typing the given text.**

**Esc – to exit insert mode**

**:wq ---- saving the file**

1. Change the word “Netware” in the second line to “Novell Netware”.

**Answer: vi network.txt ----** open the file in the Vi editor

**Esc and type /Netware**

**Type cw to change the highlighted word and replace it with “Novell Netware”**

**Esc ----**to exit

**:w ----** to save the changes.

b. Insert the text “(such as hard disks and printers)” after “share resources” in the

first line.

**type /share resources ----** to search the text

Move the cursor to the end of the phrase “share resources”

**Press a ----** to append text

Esc and type **:w ----**to save

c. Append the following text to the file:

“Managing NDS is a fundamental administrator role because NDS provides a single

point for accessing and managing most network resources.”

**Type G to move to the end of the file**

**Press o to open new line and enter text.**

**Esc and type :wq ----** to save and exit

Working shell

1. Type some text on the shell separated by space **: An apple a day keep the doctor away.**

1: Move cursor one word back **: Ctrl + Left Arrow**

2: Move cursor one word forward **: Ctrl + Right Arrow**

3: Move cursor to the first character **: Ctrl + A**

4: Move cursor to the end **: Ctrl + E**

5: Delete test from second word to last character **: Ctrl + A for going at start of the line, Ctrl + Right Arrow to move to the second word, Ctrl + K**

6: Delete the current line **: Ctrl + A, Ctrl + K**

2: In lab 4 we have created a file errorlog.txt. Display it using cat command using

command completion. **: cat errorlog.txt (for command completion use Tab key after typing few initial words of the filename.)**

3: Display history of command used so far. **: histroy**

4: Search ls command in history file **: history | grep ls**

5: Repeat the last command rd : **!! (for executing most recent command)**

6: Execute 3 command from history file. **!3**

7: What are the different shells available.

**Types of Shell:**

* 1. **Bash**
  2. **Bourne Shell**
  3. **C Shell (csh)**
  4. **Z Shell (zsh)**
  5. **Korn Shell (ksh)**
  6. **Fish (friendly interactive shell)**
  7. **Dash (Debian almquist shell)**

Understanding access permissions

7.1: Create an empty file “demofile” and perform following instruction : **touch demofile**

1. Revoke read permission from owner and use cat command. **: chmod u-r demofile**

**cat demofile ----Permission denied.**

2. Revoke write permission from owner and open using vi

editor and add some contain in it. **: chmod u-w demofile**

**vi demofile ----Permission denied to add text.**

3. Add read and write permission to owner. **: chmod u-rw demofile**

4. Revoke write and execute from other and group : **chmod go-wx demofile**

5. Add write permission to group only **: chmod g+w demofile**

6. Assign read permission to all **: chmod a+r demofile**

7. Revoke read permission from others **: chmod o-r demofile**

8. Give the execute permission for the user for a file chap1 **: chmod u+x chap1**

9. Give the execute permission for user, group and others for a file add.c **:**

**chmod a+x add.c**

10. Remove the execute permission from user, give read permission to

group and others for a file aa.c **: chmod u-x,go+r aa.c**

11. Give execute permission for users for a.c, kk.c, nato and myfile using

single command **: chmod u+x a.c kk.c nato myfile**

7.2: Create an directory “demo” and copy /etc/passwd file in it

**mkdir demo**

**cp /etc/passwd demo/**

1. Display contents of demo **: ls demo**

2. Revoke read permission from demo directory and use ls

command on it **:**

**chmod -r demo**

**ls demo ---- Output: Cannot open directory ‘demo’ : Permission denied**

3. Revoke write permission from demo directory and try to copy

/etc/profile file in it **:**

**chmod -w demo**

**cp /etc/profile demo/ ----Output: cannot create regular file ‘demo/profile’ : Permission denied**

4. Delete passwd file from demo directory :

**For deleting the file firstly restore write permission : chmod +w demo**

**rm demo/passwd**

5. Revoke execute permission from demo directory and try cd

command on demo. **:**

**chmod -x demo**

**cd demo ---- Output: Permission denied**

**Using Process-Related Commands**

1. Find out the PID of the processes that are activated by you

2. Find out the information about all the processes that are currently active

3. Start a different process in the background. Find out the status of the background

process using the PID of the same.

4. Run a job in background

5. Bring a last background job in fore ground

6. Run 3 jobs in background and bring first job in foreground

7. Stop current job

8. Start stopped job

9. Run a job

10. Kill last job

11. Kill your shell using process id

12. Execute a ls command by setting priority as -10 using nice command

13. Display a date on every hour using cron tab