**Practical: Day02**

**Steps to open PuTTY and connect to a server**

1.Open PuTTY – Search for PuTTY and launch it.

2.Enter Server Details – Input the IP address (We connect with 172.16.140.150)

3.Connect – Click Open

4.Login – Enter your username and password (hidden while typing). (Password used: 789\*asd)

5.Access Server – You’re now connected to the server!

**Common Linux command**

1**. pwd** : Show current directory (Print Working Directory).

output=>

{ IT2244\_Day4 } » pwd

/home/shifak ahamed/IT2244\_Day4

{ IT2244\_Day4 } »

2. **vi abc.txt** : If abc.txt exists, it will open for editing.

If it doesn’t exist, it will create a new file and open it.

steps=>

Open the file:

vi abc.txt

Press i and type some text.

Ctrl +c Shift :

Type wq to save and exit.

3. **more abc.txt**:

Show the data in abc file

4. **less abc.txt** :

The less command is used to view (but not edit) the contents of a file in Linux.

5. **vi abc.csv**:

CSV (Comma-Separated Values) file is a text file where columns of data are separated by comma

**6. vi abc.tsv** :

A TSV (Tab-Separated Values) file is a text file where columns of data are separated by tabs

**7. ls -ltr** :

is used to list files in a directory with detailed information,

sorted by modification time in reverse order.

**output**=>

{ IT2244\_Day4 } » ls -ltr

total 0

-rw-rwxr-x+ 1 shifak ahamed None 0 Mar 23 10:29 new

-rwxr--rwx+ 1 shifak ahamed None 0 Mar 23 12:43 abc.txt~

-rwxr--rwx+ 1 shifak ahamed None 0 Mar 23 20:16 abc.txt

{ IT2244\_Day4 } »

**Explanation**=>

File permission

Each file and directory have three types of permissions: read, write, and execute

These permissions are granted to three groups: User (Owner) ,Group ,Others

Read (r), Write (w), and Execute (x) Permissions

Ex: -rwxrwxrwx+

- ->Regular file

9 Characters (Permissions)

1st 3:rwx → User (Owner), 2nd 3:groups ,3rd 3:others

Ex: -rwxr-xr-x

This means:

User (owner) has read, write, and execute permissions (rwx).

Group has read and execute permissions (r-x).

Others have read and execute permissions (r-x).

Changing File Permissions (Using chmod) ........

Ex:

chmod u+x file.txt → Add execute permission to the user (owner) for file.txt.

chmod g-w file.txt → Remove write permission from the group for file.txt.

chmod o+r file.txt → Add read permission for others.

Numeric (Octal) Notation

r = 4, w = 2, x = 1

remove file permissions.......

chmod 000 filename

**8. ls -l :**

lists detailed information about files and directories in the current directory.

9**. ls -lh:**

Show file sizes in human-readable format (KB, MB, GB).

10**. ls -la** :

Show hidden files along with detailed info.

11.**find -name "\*.csv" :**

search for files with the .csv extension

12**. wc -l abc.csv** :

display the number of lines

wc: The wc (word count) command is used to display the number of lines, words, and bytes in a file.

-l: This option tells wc to show the number of lines in the file

13. **cut -d ',' -f2 pqr.csv** :

will output the second column (field) from each line

cut: The command used to remove or extract sections from each line of a file.

-d ',': This option specifies the delimiter, which in this case is a comma (,).

It tells cut to treat commas as the separator between fields in each line of the file.

-f2: This option tells cut to extract the second field (column) from each line.

14. **awk -F ',' '{print $1}' pqr.csv :**

will print the first column (field) of every line

awk: This is a powerful text-processing tool that allows you to manipulate and process data in a file, usually line by line.

-F ',': This option sets the field delimiter to a comma (,). It tells awk that the columns in your file are separated by commas.

'{print $1}': This is the action that awk performs. It prints the first field (column) of each line. $1 refers to the first field in the line.

15. **cut -d',' -f1,3 pqr.csv** :

will print the first and third columns from each lines

16**.head -n 5 pqr.csv** :

used to display the first 5 lines

17**: tail -n 2 pqr.csv :**

used to display the last 2 line

tail: This command is used to show the end (last) part of a file.

18. **cut -d',' -f1,2 pqr.csv** :

will print the first and second columns (fields) of each line

cut: This command extracts sections from each line of a file.

-d',': This option sets the delimiter to a comma (,), which means the columns in the file are separated by commas.

-f1,2: This option specifies which fields (columns) to extract.

In this case, 1,2 tells cut to extract the first and second columns from each line.

19. **head -n 3 pqr.csv >> pqrNew.csv** :

used to take the first 3 lines of a file (pqr.csv) and append them to another file (pqrNew.csv).

head: This command outputs the beginning (first part) of a file.

-n 3: This option specifies the number of lines to display

>>: This is the append operator

20. **clear**:

used to clear the terminal screen, removing all previous commands and output

**command prompt**

1.create 2 txt file(abc,xyz) in desktop

2.set the Read-only attribute to the file abc.txt.

Set the hidden attribute of xyz.txt to hidden

ATTRIB command is used to view or change the attributes of files and directories in Windows.

3.now, to make abc.txt visible we can use the following command

ATTRIB +R abc.txt:This command adds the Read-only attribute to the file abc.txt.

Once this is done, the file abc.txt will be marked as read-only,

meaning it cannot be modified unless the read-only attribute is removed.

ATTRIB -H xyz.txt:This command removes the Hidden attribute from the file xyz.txt.

Now abc.txt will become visible after running this command.