Q1. Explore the following commands with various options, refer man pages for

further help

1. date

-$ date

Tue Sep 8 20:20:11 IST 2020

-$date +%a : Tue

-$date +%A : Tuesday

-$date +%b : Sep

-$ date +%B : September

-$date +%d : 08

-$date +%D : 09/08/20

-$date +%F : 2020-09-08

-$date +%T : 20:26:18

-$ date +%B' '%d' '%y : September 08 20

1. cal

-$cal

-$ cal 2022

-$cal jan 2021

1. bc

-$bc

-$ echo "12+5" | bc

1. echo

-$echo Hello

-$ no=10

-$ echo "Number= ${no}" :Number= 10

1. who

-$who -m -H

-$ who -p -H

-$ who -q -H

1. whoami

-$whoami

1. logname

-print the users login name

1. uname

-$ uname

Linux

I) seq

-$ seq 5 2 20

-$seq 5

-$seq 1 10

1. clear

-It clear the terminal screen

Q2. A) Create three directory a b and c and create a.txt,b.txt and c.txt

in each directory respectively and then copy c directory into the a.

- $mkdir a b c

-$ cd a

-:~/a# cat > a.txt

-:~/b# cat > b.txt

-:~/c# cat > c.txt

-$ cp -R c a

-$ cd a

-:~/a# ls

-:~/a# cd c

-:~/a/c# ls

B)Move Directory b to c.

-:~# cp -R b c

-:~# cd c

-:~/c# ls

C)Create alias of ls -lh command to your name.

-$ alias Bhagyashri='clear'

-$ Bhagyashri

D)Change Directory name a to cdac.

-$ mv a cdac

Q3. A) Create five files file1.txt , file2.txt ,file3.txt file4.txt and file5.txt with some text inside it. Search for 's' character inside all the files using grep command.

Also Use cat to view all file content together.

- $cat > file1.txt

-$ cat > file2.txt

-$ cat > file3.txt

-$ cat > file4.txt

-$ cat > file5.txt

-$ grep 's' file1.txt file2.txt file3.txt file4.txt file5.txt

B)Create file.txt using cat and edit that using nano editor.

-$cat > file.txt

-$ nano file.txt

c)Create 5 empty files using touch command

-$ touch a1.txt a2.txt a3.txt a4.txt a5.txt

D)Remove previously created directory a , b and c.

-$rm -r a b c

Q4. Create a file with some content using vi editor

-$vi f1.txt

1. Display the file using cat command

-$cat f1.txt

b) Display line numbers along with content

-$ cat --number f1.txt

c)Display the file in reverse order using tac

-$tac f1.txt

d) Combine multiple files using cat command

-$ cat f1.txt vim.txt t1.txt vi.txt > main.txt

-$ cat main.txt

Q5. Create Random some files and sub directories.

1. display files row wise, column wise, 1 per row

-$column city

1. sort the files in ascending, descending order

-$ ls –la

-$ ls –lr

c) Create some hidden files and sub directories and display them using “ls -a”

-$ ls –a

d) Change time stamp of some files and directories using touch command and display the

files using ls -t ls –rt

-$ touch -d '12 sep' a1.txt

-$ touch -d 18:18:16 a2.txt

-$ ls -t

-$ ls –rt

e) Recursive display contents of your home directory.

-$ls –R

f) display all attributes of files and directories using

-$ls –l

g) display attributes of a directory using ls -ld

-$ls -ld

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Q1. Create directory of your name and then create 4 files inside it named

a.txt, b.txt, c.txt and d.sh. And change the directory permission to

only user and also files permission to only user such that

mkdir bhagyashri

-$ cd bhagyashri

bhagyashri# touch a.txt b.txt c.txt

bhagyashri# vi d.sh

$ chmod 700 bhagyashri

a)user can read and write the file a.txt and b.txt

$ chmod 600 a.txt b.txt

b)user can write the file c.txt

$chmod 200 c.txt

c)user can exectuable the file d.sh. Make

Contents of file d.sh:

#/bin/sh

ls –lh

$chmod 100 d.sh

Q2. Change the permission of the previous directory to executable only.

Analyze the output.

$chmod 100 bhagyashri

Q3. Change the permission of the previous directory to read only.

Analyze the output.

$chmod 400 bhagyashri

Q4. Use echo to list the all files of your home directory.

$echo \*

Q5. Use echo to list the all files of /etc/ directory

$ echo \*/

Q6. Use echo to list the all files of /etc/ directory with extension name .conf

$ echo \*.conf

Q7. Use echo to append your name to a.txt

$ echo "bhagyashri" > a.txt

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Note:Many operation might not work.Analyze them

1. Create Three level nested directory a,b and c

$mkdir a --> cd a

$mkdir b --> cd b

$mkdir c --> cd c

1. Create at least one hidden file in each directory

$touch .a.txt

$touch .b.txt

$touch .c.txt

1. Create at least one normal text file in each directory

$touch a.txt

$touch b.txt

$touch c.txt

1. Copy c into a

$ cp a/b/c a -R

1. Copy file inside a into b

$cp \*.txt b -R

1. Change the third level directory c permission to read only

$chmod 444 c

1. Try copying third level c directory to outside of a

$ cp a/b/c bhagyashri –R

1. Create the directory “data“ inside b

$mkdir data

1. Change the permission of b to read and write only

$chmod 666 b

1. Create directory “data2” inside b

$mkdir data2 b

1. Create data.txt file inside b

$touch data.txt

1. Rename the second level directory c to copied\_dir

$ mv c copied\_dir

1. Change permission of copied\_dir to only executable

$chmod 111 copied\_dir

1. Try ls on copied\_dir

$ls

1. Try moving copied\_dir to outside of a

$ cp a/b/copied\_dir bhagyashri –R

1. Try moving data directory outside of a

$cp a/b/data bhagyashri –R

1. Now change the owner of the directory a to root

$chown root a

1. Change permission of a to read write and executable to only user

$chmod 700 a

1. Try creating directory sample inside a

$mkdir sample

1. Create directory x outside a

$mkdir x

1. Try moving x inside a

$ mv x a

1. Create directory movies

$mkdir movies

1. Change group of movies to sudo

$chgrp sudo movies

1. Change group of movies to avahi

-Invalid group

1. Try changing permission after changing ownership to root

$ chmod 710 movies

1. Try Changing permission after changing group to sudo without sudo

$ chmod 700 movies

1. Try Changing owner and group both to root

$chown root movies

$ chgrp root movies

1. Try changinging permission

$chmod 222 movies

1. Try deleting the file

$ rm movies -R