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

further help a) date b) cal c) bc d) echo e) who f) whoami g) logname g) uname h)

seq i) clear

* date = Mon Sep 7 21:36:46 IST 2020

cal = display calendar

bc = **bc command** is used for **command** line calculator. It is similar to basic calculator by **using** which we can do basic mathematical calculations. Arithmetic operations are the most basic in any kind of programming language.

Whoami – ashish

Logname-

Uname- Linux

Seq-

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

touch a.txt a

touch b.txt b

touch c.txt c

cp -r c a

B) Move Directory b to c.

🡺 mv b c

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

🡺 alias vicky="ls -lh"

D) Change Directory name a to cdac.

🡺 mv a.txt cdac.txt

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.

🡺 touch file1.txt file2.txt file3.txt file4.txt file5.txt

🡺 cat > file1.txt ("i am 1"), cat > file2.txt ("i am 2"), cat > file3.txt ("i am 3"), cat > file4.txt ("i am 4 s"), cat > file5.txt ("i am 5")

🡺 grep 's' file4.txt

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

🡺 nano file.txt

C) Create 5 empty files using touch command

🡺 touch file1.txt file2.txt file3.txt file4.txt file5.txt

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

🡺 rm -r a c

Q4. Create a file with some content using vi editor

1. Display the file using cat command

🡺 cat file6.txt

(inside vi editor) hello

:wq…(write & quit)(if modifications needed)….else to just see the text..:q(quit)(without modification)

1. Display line numbers along with content

🡺 cat -n file1.txt

1. Display the file in reverse order using tac

🡺 tac file1.txt…(prints upside down)

d) Combine multiple files using cat command

🡺 cat file1.txt file2.txt file6.txt

Q5. Create Random some files and sub directories.

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

🡺 column file1.txt

column -t file1.txt

1. Sort the files in ascending, descending order.

🡺 sort file1.txt

sort –r file1.txt

1. Create some hidden files and sub directories and display them using “ls -a”.
2. Change time stamp of some files and directories using touch command and display the files using ls -t ls -rt.

🡺 touch – a –m –t file.txt

1. Recursive display contents of your home directory.

🡺 ls -R

1. Display all attributes of files and directories using ls –l

🡺 total 0

-rw-r--r-- 1 ashish ashish 0 Sep 7 21:50 a.txt

-rw-r--r-- 1 ashish ashish 16 Sep 8 18:43 abc.sh

-rw-r--r-- 1 ashish ashish 0 Sep 7 21:50 b.txt

-rw-r--r-- 1 ashish ashish 0 Sep 7 21:50 c.txt

-rw-r--r-- 1 ashish ashish 28 Sep 8 22:50 file.txt

-rw-r--r-- 1 ashish ashish 9 Sep 8 10:26 file1.txt

-rw-r--r-- 1 ashish ashish 9 Sep 8 10:26 file2.txt

-rw-r--r-- 1 ashish ashish 9 Sep 8 10:27 file3.txt

-rw-r--r-- 1 ashish ashish 11 Sep 8 10:27 file4.txt

-rw-r--r-- 1 ashish ashish 9 Sep 8 10:28 file5.txt

-rw-r--r-- 1 ashish ashish 36 Sep 8 15:12 file6.txt

g) Display attributes of a directory using ls -ld.

🡺 drwxr-xr-x 1 ashish ashish 4096 Sep 10 22:33 .

==================================================================================

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

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

🡺 cat > a.txt

cat> b.txt

1. user can write the file c.txt

🡺 cat c.txt

1. user can executable the file d.sh. Make Contents of file d.sh: #/bin/sh ls –lh

* chmod 111 hack.sh

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

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

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

* cd /home/

echo ashish

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

🡺

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

==================================================================================Note: Many operation might not work. Analyse them

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

a) Create at least one hidden file in each directory

🡺 cat > file1.txt

b) Create at least one normal text file in each directory

🡺

c) Copy c into a

d) Copy file inside a into b

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

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

🡺

4. Create the directory “data“ inside b

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

6. Create directory “data2” inside b

7. Create data.txt file inside b

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

9. Change permission of copied\_dir to only executable

10. Try ls on copied\_dir

11. Try moving copied\_dir to outside of a

12. Try moving data directory outside of a

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

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

15. Try creating directory sample inside a

16. Create directory x outside a

17. Try moving x inside a

18. Create directory movies

19. Change group of movies to sudo

20. Change group of movies to avahi

21. Try changing permission after changing ownership to root

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

23. Try Changing owner and group both to root

24. Try changinging permission

25. Try deleting the file