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

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

seq i) clear

1)

date:

sayali@DESKTOP-059IGA7:~$ date +%a

Tue

sayali@DESKTOP-059IGA7:~$ date +%A

Tuesday

sayali@DESKTOP-059IGA7:~$ date +%b

Sep

sayali@DESKTOP-059IGA7:~$ date +%c

Tue Sep 8 08:09:52 2020

sayali@DESKTOP-059IGA7:~$ date +%C

20

sayali@DESKTOP-059IGA7:~$ date +%d

08

sayali@DESKTOP-059IGA7:~$ date +%D

09/08/20

sayali@DESKTOP-059IGA7:~$ date +%e

8

sayali@DESKTOP-059IGA7:~$ date +%F

2020-09-08

sayali@DESKTOP-059IGA7:~$ man date

sayali@DESKTOP-059IGA7:~$ date +%g

20

sayali@DESKTOP-059IGA7:~$ date +%G

2020

sayali@DESKTOP-059IGA7:~$ date +%h

Sep

sayali@DESKTOP-059IGA7:~$ date +%H

08

sayali@DESKTOP-059IGA7:~$ date +%I

08

sayali@DESKTOP-059IGA7:~$ date +%k

8

sayali@DESKTOP-059IGA7:~$ date +%l

8

sayali@DESKTOP-059IGA7:~$ date +%M

20

sayali@DESKTOP-059IGA7:~$ date +%N

357682500

sayali@DESKTOP-059IGA7:~$ date +%p

AM

sayali@DESKTOP-059IGA7:~$ date +%P

am

sayali@DESKTOP-059IGA7:~$ date +%q

3

sayali@DESKTOP-059IGA7:~$ date +%r

08:21:20 AM

sayali@DESKTOP-059IGA7:~$ date +%R

08:21

sayali@DESKTOP-059IGA7:~$ date +%s

1599578495

sayali@DESKTOP-059IGA7:~$ date +%S

53

sayali@DESKTOP-059IGA7:~$ date +%T

08:22:08

sayali@DESKTOP-059IGA7:~$ date +%u

2

2)cal:

sayali@DESKTOP-059IGA7:~$ cal

September 2020

Su Mo Tu We Th Fr Sa

1 2 3 4 5

6 7 8 9 10 11 12

13 14 15 16 17 18 19

20 21 22 23 24 25 26

27 28 29 30

sayali@DESKTOP-059IGA7:~$ cal -y

2020

January February March

Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa

1 2 3 4 1 1 2 3 4 5 6 7

5 6 7 8 9 10 11 2 3 4 5 6 7 8 8 9 10 11 12 13 14

12 13 14 15 16 17 18 9 10 11 12 13 14 15 15 16 17 18 19 20 21

19 20 21 22 23 24 25 16 17 18 19 20 21 22 22 23 24 25 26 27 28

26 27 28 29 30 31 23 24 25 26 27 28 29 29 30 31

April May June

Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa

1 2 3 4 1 2 1 2 3 4 5 6

5 6 7 8 9 10 11 3 4 5 6 7 8 9 7 8 9 10 11 12 13

12 13 14 15 16 17 18 10 11 12 13 14 15 16 14 15 16 17 18 19 20

19 20 21 22 23 24 25 17 18 19 20 21 22 23 21 22 23 24 25 26 27

26 27 28 29 30 24 25 26 27 28 29 30 28 29 30

31

July August September

Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa

1 2 3 4 1 1 2 3 4 5

5 6 7 8 9 10 11 2 3 4 5 6 7 8 6 7 8 9 10 11 12

12 13 14 15 16 17 18 9 10 11 12 13 14 15 13 14 15 16 17 18 19

19 20 21 22 23 24 25 16 17 18 19 20 21 22 20 21 22 23 24 25 26

26 27 28 29 30 31 23 24 25 26 27 28 29 27 28 29 30

30 31

October November December

Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa

1 2 3 1 2 3 4 5 6 7 1 2 3 4 5

4 5 6 7 8 9 10 8 9 10 11 12 13 14 6 7 8 9 10 11 12

11 12 13 14 15 16 17 15 16 17 18 19 20 21 13 14 15 16 17 18 19

18 19 20 21 22 23 24 22 23 24 25 26 27 28 20 21 22 23 24 25 26

25 26 27 28 29 30 31 29 30 27 28 29 30 31

sayali@DESKTOP-059IGA7:~$ cal jan 2020

January 2020

Su Mo Tu We Th Fr Sa

1 2 3 4

5 6 7 8 9 10 11

12 13 14 15 16 17 18

19 20 21 22 23 24 25

26 27 28 29 30 31

sayali@DESKTOP-059IGA7:~$ cal -m1 2020

January 2020

Su Mo Tu We Th Fr Sa

1 2 3 4

5 6 7 8 9 10 11

12 13 14 15 16 17 18

19 20 21 22 23 24 25

26 27 28 29 30 31

3)

bc:

sayali@DESKTOP-059IGA7:~$ bc

bc 1.07.1

4)

echo:

sayali@DESKTOP-059IGA7:~$ echo sayali

sayali

5)

whoami:

sayali@DESKTOP-059IGA7:~$ whoami

sayali

6)

uname:

sayali@DESKTOP-059IGA7:~$ uname

Linux

7)

seq:

sayali@DESKTOP-059IGA7:~$ seq 8

1

2

3

4

5

6

7

8

8)

sayali@DESKTOP-059IGA7:~$ clear

9)

logname:

sayali@DESKTOP-059IGA7:~$ logname

logname: no login name

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.

B)Move Directory b to c.

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

D)Change Directory name a to cdac.

Ans:-

sayali@DESKTOP-059IGA7:~$ mkdir a b c

sayali@DESKTOP-059IGA7:~$ mkdir a

sayali@DESKTOP-059IGA7:~$ touch a.txt b.txt c.txt

sayali@DESKTOP-059IGA7:~$ mv c a

@DESKTOP-059IGA7:~$ mv b c

sayali@DESKTOP-059IGA7:~$ ls -al

total 28

drwxr-xr-x 1 sayali sayali 4096 Sep 8 09:04 .

drwxr-xr-x 1 root root 4096 Sep 6 10:50 ..

-rw------- 1 sayali sayali 2091 Sep 8 09:02 .bash\_history

-rw-r--r-- 1 sayali sayali 220 Sep 6 10:50 .bash\_logout

-rw-r--r-- 1 sayali sayali 3771 Sep 6 10:50 .bashrc

drwxr-xr-x 1 sayali sayali 4096 Sep 6 10:51 .landscape

-rw-rw-rw- 1 sayali sayali 0 Sep 8 08:06 .motd\_shown

-rw-r--r-- 1 sayali sayali 807 Sep 6 10:50 .profile

drwxr-xr-x 1 sayali sayali 4096 Sep 7 23:36 .vim

-rw------- 1 sayali sayali 7244 Sep 8 06:11 .viminfo

-rw-rw-rw- 1 sayali sayali 51 Sep 8 06:11 R1.txt

drwxrwxrwx 1 sayali sayali 4096 Sep 8 02:27 a

-rw-rw-rw- 1 sayali sayali 0 Sep 7 09:00 a.1.css.html

drwxrwxrwx 1 sayali sayali 4096 Sep 8 08:53 a.txt

-rw-rw-rw- 1 sayali sayali 0 Sep 7 08:58 a1.text.html.js

drwxrwxrwx 1 sayali sayali 4096 Sep 8 08:53 b.txt

drwxrwxrwx 1 sayali sayali 4096 Sep 8 09:04 c

drwxrwxrwx 1 sayali sayali 4096 Sep 8 08:53 c.txt

drwxrwxrwx 1 sayali sayali 4096 Sep 7 04:57 cdac

drwxrwxrwx 1 sayali sayali 4096 Sep 7 06:33 dir2

drwxrwxrwx 1 sayali sayali 4096 Sep 7 06:28 dir3

-rw-rw-rw- 1 sayali sayali 1 Sep 7 23:32 for.txt

-rw-rw-rw- 1 sayali sayali 19 Sep 7 04:58 index.js

-rw-rw-rw- 1 sayali sayali 87 Sep 8 05:47 loop1.txt

drwxrwxrwx 1 sayali sayali 4096 Sep 7 06:28 s1s2

drwxrwxrwx 1 sayali sayali 4096 Sep 7 23:36 s7

drwxrwxrwx 1 sayali sayali 4096 Sep 7 06:27 say

-rw-rw-rw- 1 sayali sayali 18 Sep 7 23:39 ss.txt

-rw-rw-rw- 1 sayali sayali 0 Sep 7 06:23 test1

-rw-rw-rw- 1 sayali sayali 18 Sep 7 23:46 text3.txt

sayali@DESKTOP-059IGA7:~$ 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.

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

c)Create 5 empty files using touch command

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

Ans:-

sayali@DESKTOP-059IGA7:~$ cat > s.txt

sayali

sayali@DESKTOP-059IGA7:~$ cat > v.txt

svara

sayali@DESKTOP-059IGA7:~$ cat > t.txt

cdac

sayali@DESKTOP-059IGA7:~$ cat > h.txt

kharghar

sayali@DESKTOP-059IGA7:~$ cat > r.txt

sayu

sayali@DESKTOP-059IGA7:~$ grep s s.txt v.txt t.txt h.txt r.txt

s.txt:sayali

v.txt:svara

r.txt:sayu

sayali@DESKTOP-059IGA7:~$ cat s.txt v.txt t.txt h.txt r.txt

sayali

svara

cdac

kharghar

sayu

sayali@DESKTOP-059IGA7:~$ cat > new.txt

mumbai

sayali@DESKTOP-059IGA7:~$ nano new.txt

sayali@DESKTOP-059IGA7:~$ cat new.txt

mumbai

is city.

sayali@DESKTOP-059IGA7:~$ touch m.txt u.txt r.txt b.txt i.txt

sayali@DESKTOP-059IGA7:~$ rmdir a

sayali@DESKTOP-059IGA7:~$ rmdir b

sayali@DESKTOP-059IGA7:~$ rmdir c

Q4. Create a file with some content using vi editor

a) Display the file using cat command

b) Display line numbers along with content

c) Display the file in reverse order using tac

d) Combine multiple files using cat command

ans:-

sayali@DESKTOP-059IGA7:~$ cat > sayu2.txt

sayali@DESKTOP-059IGA7:~$ vi sayu2.txt

sayali@DESKTOP-059IGA7:~$ cat sayu2.txt

echo sayali rane;

sayali@DESKTOP-059IGA7:~$ cat -n sayu2.txt

1 echo0 sayali rane

2 mobile no:7507519785

3 nickname:sayu

4 birthdate:13-07-1997

5

sayali@DESKTOP-059IGA7:~$ tac sayu2.txt

birthdate:13-07-1997

nickname:sayu

mobile no:7507519785

echo0 sayali rane

sayali@DESKTOP-059IGA7:~$ cat sayu.txt sayu2.txt

I LOVE CDAC .........!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

echo0 sayali rane

mobile no:7507519785

nickname:sayu

birthdate:13-07-1997

Q5. Create Random some files and sub directories.

a) display files row wise, column wise, 1 per row

b) sort the files in ascending, descending order

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

d) Change time stamp of some files and directories using touch command and display the files using ls -t ls -rt

e) Recursive display contents of your home directory.

f) display all attributes of files and directories using ls -l

g) display attributes of a directory using ls –ld

B)

sayali@DESKTOP-059IGA7:~$ sort file.txt

sayali@DESKTOP-059IGA7:~$ sort -r file.txt

C)

sayali@DESKTOP-059IGA7:~$ touch .h1.txt

sayali@DESKTOP-059IGA7:~$ mkdir .h1

sayali@DESKTOP-059IGA7:~$ ls –a

E) sayali@DESKTOP-059IGA7:~$ ls -rt

F) sayali@DESKTOP-059IGA7:~$ ls -l

G) sayali@DESKTOP-059IGA7:~$ 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

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

b)user can write the file c.txt

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

Contents of file d.sh:

#/bin/sh

ls –lh

Ans:-

sayali@DESKTOP-059IGA7:~$ mkdir sayali

sayali@DESKTOP-059IGA7:~$ touch a.txt b.txt c.txt d.sh

A)

sayali@DESKTOP-059IGA7:~$ chmod +rw a.txt b.txt

B)

sayali@DESKTOP-059IGA7:~$ chmod +w c.txt

C)

sayali@DESKTOP-059IGA7:~$ cat > d.sh

#/bin/sh

sayali@DESKTOP-059IGA7:~$ chmod +x d.sh

sayali@DESKTOP-059IGA7:~$ ls -lh

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

Analyze the output.

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

Analyze the output.

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

Ans:- sayali@DESKTOP-059IGA7:~$ echo .\* \*

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

Ans:- sayali@DESKTOP-059IGA7:~$ ls /etc

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

Ans:-

sayali@DESKTOP-059IGA7:~$ find /etc -type f -name "\*.conf"

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

Ans:-

echo 'sayali' >>sayu.txt

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Note:Many operation might not work.Analyze them

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

a)Create at least one hidden file in each directory

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

c)Copy c into a

d)Copy file inside a into b

Answer :-

mkdir a

cd a

mkdir b

cd b

mkdir c

cd c

A)

mkdir .c

cd ..

mkdir .b

cd ..

mkdir .a

B)

touch a.txt

cd b

touch b.txt

cd c

touch c.txt

C)

cp a/b/c/\* a -R

D)

cp: cannot copy a directory, 'a/b', into itself, 'a/b/b'

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

chmod +r c

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

cp sayali/a/b/c\*e -R

4. Create the directory “data“ inside b

cd b mkdir data

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

chmod +rw b

6. Create directory “data2” inside b

mkdir data2

7. Create data.txt file inside b

touch data.txt

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

mv c copied dir

9. Change permission of copied\_dir to only executable

chmod -x copied\_dir

10. Try ls on copied\_dir

ls -d -s 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

chmod u+rwx sayali

15. Try creating directory sample inside a

mkdir sample

16. Create directory x outside a

mkdir x

17. Try moving x inside a

mv x a

18. Create directory movies

mkdir 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