**Question 1.1**

**use a command to show the current working directory –**

**list the directory contents in the short and long format (with file permissions,owner,size etc,.).**

**Explore attributes given in long format e.g. file type, file permissions, file size, file owner etc. –**

**list all files along with hidden files in current working directory. - list only hidden files in the directory (Hint : use pwd, ls, echo commands)**

root@antman-VirtualBox:/home/antman/assignemnt# pwd

/home/antman/assignment

root@antman-VirtualBox:/home/antman# ls

a1.sh Desktop Downloads Pictures Templates

assignemnt Documents Music Public Videos

root@antman-VirtualBox:/home/antman# ls -l

total 40

drwxrwxr-x 2 antman antman 4096 Mar 16 11:29 assignemnt

drwxr-xr-x 2 antman antman 4096 Apr 11 12:23 Desktop

drwxr-xr-x 2 antman antman 4096 Apr 11 12:23 Documents

drwxr-xr-x 2 antman antman 4096 Apr 11 12:23 Downloads

drwxr-xr-x 2 antman antman 4096 Apr 11 12:23 Music

drwxr-xr-x 2 antman antman 4096 Apr 11 12:23 Pictures

drwxr-xr-x 2 antman antman 4096 Apr 11 12:23 Public

drwxr-xr-x 2 antman antman 4096 Apr 11 12:23 Templates

drwxr-xr-x 2 antman antman 4096 Apr 11 12:23 Videos

root@antman-VirtualBox:/home/antman# ls -ld

drwxr-xr-x 17 antman antman 4096 Mar 16 11.28.

root@antman-VirtualBox:/home/antman# ls -a

. .bash\_history Desktop .mozilla .ssh

.. .bash\_logout Documents Music .sudo\_as\_admin\_successful

a1.sh .bashrc Downloads Pictures Templates

.a1.sh.swp .cache .gnupg .profile Videos

assignemnt .config .local Public

**Question 1.2**

**Make a directory and name it as cdac-dir and change the current working directory to the new directory.(Hint : use mkdir,cd commands).**

root@antman-VirtualBox:/home/antman# mkdir cdac-dir

root@antman-VirtualBox:/home/antman# cd cdac-dir

root@antman-VirtualBox:/home/antman/cdac-dir# pwd

/home/antman/cdac-dir

**Question.1.3 .**

**Create following nested directories inside current directory by invoking single command for only one time.**

antman@antman-VirtualBox:~/new$ mkdir -p a1/b1 a1/b2 a2/c1 a2/c2 aa1/bb1/cc1 aa2/bb2/cc2

antman@antman-VirtualBox:~/new$ tree

├── a1

│   ├── b1

│   └── b2

├── a2

│   ├── c1

│   └── c2

├── aa1

│   └── bb1

│   └── cc1

└── aa2

└── bb2

└── cc2

12 directories, 0 files

**Question 1.4**

**List the directories(folders), then remove the cdac-dir directory and list the folders again to show that it is no longer present.(Hint : use rm, ls command)**

antman@antman-VirtualBox:~/new$ ls

a1 a2 aa1 aa2 cdac-dir

antman@antman-VirtualBox:~/new$ rmdir cdac-dir

antman@antman-VirtualBox:~/new$ ls

a1 a2 aa1 aa2

**Question 2.1**

**Display the man-page for ls, but redirect the output into temp.txt, then use the cat, less, and more commands to display the new file.**

antman@antman-VirtualBox:~/new$ touch temp.txt

antman@antman-VirtualBox:~/new$ man ls >> temp.txt

antman@antman-VirtualBox:~/new$ cat temp.txt

LS(1) User Commands LS(1)

NAME

ls - list directory contents

SYNOPSIS

ls [OPTION]... [FILE]...

DESCRIPTION

List information about the FILEs (the current directory by default).

Sort entries alphabetically if none of -cftuvSUX nor --sort is speci‐

fied.

Mandatory arguments to long options are mandatory for short options

too.

-a, --all

do not ignore entries starting with .

-A, --almost-all

do not list implied . and ..

--author

with -l, print the author of each file

-b, --escape

print C-style escapes for nongraphic characters

**Question.2.2**

**Display the initial 10 lines and final 5 lines of temp.txt with the obvious Linux commands.(Hint: use head and tail commands).**

antman@antman-VirtualBox:~/new$ head -n 10 temp.txt

LS(1) User Commands LS(1)

NAME

ls - list directory contents

SYNOPSIS

ls [OPTION]... [FILE]...

DESCRIPTION

List information about the FILEs (the current directory by default).

antman@antman-VirtualBox:~/new$ tail -n 5 temp.txt

SEE ALSO

Full documentation at: <https://www.gnu.org/software/coreutils/ls>

or available locally via: info '(coreutils) ls invocation'

GNU coreutils 8.30 September 2019 LS(1)

**Question 2.3.**

**Copy temp.txt to another directory and rename it there. (Hint: use cp to copy and mv command to rename).**

antman@antman-VirtualBox:~/new$ ls

a1 a2 aa1 aa2 temp.txt

antman@antman-VirtualBox:~/new$ mv temp.txt a1

antman@antman-VirtualBox:~/new$ cd a1

antman@antman-VirtualBox:~/new/a1$ ls

b1 b2 temp.txt

antman@antman-VirtualBox:~/new$ ls

a1 a2 aa1 aa2

**Question 2.4 .**

**Display the number of lines, words and characters in file using Linux command (Hint: use wc command).**

root@antman-VirtualBox:/home/antman/cdac-dir# cat > a1.txt

sanket

sarvesh

sagar

sujit

kolhapur

kasarde

kankavli

kokan

sindhudurg

root@antman-VirtualBox:/home/antman/cdac-dir# wc a1.txt

8 8 59 a1.txt

**Question 2.5**

**Use history command to display last 10 commands used. (Hint: use history command).**

root@antman-VirtualBox:/home/antman/cdac-dir# history

1 sudo apt update

2 sudo apt install postgresql postgresql-contrib

3 ps aux | grep postgres

4 vi a1.sh

5 pwd

6 lz

7 ls

8 cd ..

9 ls

10 ls -l

**Question-3. 1**

**Create tar archive file of any directory present in your home directory. (Hint: use tar command) - list the contents of the archive file without extracting.**

root@antman-VirtualBox:/home/antman/cdac-dir# ls

a1 a1.txt a2 aa1 aa2 file.txt temp.txt

root@antman-VirtualBox:/home/antman/cdac-dir# tar cvf file.rar temp.txt

temp.txt

root@antman-VirtualBox:/home/antman/cdac-dir# ls

a1 a1.txt a2 aa1 aa2 file.rar file.txt temp.txt

root@antman-VirtualBox:/home/antman/cdac-dir# tar tvf file.rar

-rw-r--r-- root/root 0 2022-03-16 12:24 temp.txt

**Question 3.2.**

**Create zip file of another directory. (Hint: use zip command) - list the contents of the zip file without extracting.**

root@antman-VirtualBox:/home/antman/cdac-dir# cd ..

root@antman-VirtualBox:/home/antman# ls

a1.sh Desktop 'Linux Command' Pictures Videos

assignemnt Documents Music Public

cdac-dir Downloads new Templates

root@antman-VirtualBox:/home/antman# gzip -r cdac-dir

root@antman-VirtualBox:/home/antman# ls

a1.sh Desktop 'Linux Command' Pictures Videos

assignemnt Documents Music Public

cdac-dir Downloads new Templates

root@antman-VirtualBox:/home/antman# cd cdac-dir

root@antman-VirtualBox:/home/antman/cdac-dir# ls

a1 a1.txt.gz a2 aa1 aa2 file.rar.gz file.txt.gz temp.txt.gz

root@antman-VirtualBox:/home/antman/cdac-dir# zmore temp.txt

**Question 3.3**

**Give read, write & execute permissions to your file. (Hint: use chmod command)**

root@antman-VirtualBox:/home/antman# ls -l

-rw-r--r-- 1 root root 0 Mar 16 12:33 f1.txt

oot@antman-VirtualBox:/home/antman# chmod 777 f1.txt

root@antman-VirtualBox:/home/antman# ls -l

-rwxrwxrwx 1 root root 0 Mar 16 12:33 f1.txt

**Question 3.4.**

**Change ownership of that file.(Hint: use chown command)**

root@antman-VirtualBox:/home/antman# ls -l

-rwxrwxrwx 1 root root 0 Mar 16 12:33 f1.txt

root@antman-VirtualBox:/home/antman# chown antman f1.txt

root@antman-VirtualBox:/home/antman# ls -ls

0 -rwxrwxrwx 1 antman root 0 Mar 16 12:33 f1.txt

**Question-4.1**

**Display current time and calendar (Hint: use date, cal commands)**

root@antman-VirtualBox:/home/antman# date

Wednesday 16 June 2022 12:43:19 PM IST

root@antman-VirtualBox:/home/antman# cal -m 3

March 2022

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

**Question 4.2**

**Change the current date and time of the system to following 14th March 2017, 10:10 AM**

root@antman-VirtualBox:/home/antman# date -d "14 March 2017 10:10 AM"

Tuesday 14 March 2017 10:10:00 AM IST

**Question 4.3.**

**Explore following commands who, whoami, whatis, whereis, (Hint: use man pages)**

root@antman-VirtualBox:/home/antman# whatis who

who (1) - show who is logged on

root@antman-VirtualBox:/home/antman# whatis whatis

whatis (1) - display one-line manual page descriptions

root@antman-VirtualBox:/home/antman# whatis whoami

whoami (1) - print effective userid

root@antman-VirtualBox:/home/antman# whatis whereis

whereis (1) - locate the binary, source, and manual page files for a...