

Write and execute a shell script to do the following.

4. To illustrate directory/folder related commands.

#Shell script to illustrate directory/folder related commands

clear

echo The present working directory is

pwd

echo the files and directories in the present working directory are

ls -l

echo create new directory 4semcse

mkdir 4semcse

echo change present working directory to 4semcse

cd 4semcse

pwd

ls -l

echo change present working directory to one level back

cd ..

pwd

echo remove newly created directory 4semcse

rmdir 4semcse

ls 4semcse

Write and execute a shell script to do the following.

5. To illustrate file related commands

#Shell script to illustrate file related commands

clear

echo Create new file file1.txt

touch file1.txt

ls -l file1.txt

echo Copy file1.txt to file2.txt

cp file1.txt file2.txt

ls -l file2.txt

echo Delete file2.txt

rm file2.txt

ls -l file2.txt

echo Move the content of file1.txt to file2.txt

mv file1.txt file2.txt

ls -l file1.txt

Write and execute a shell script to do the following.

6. To illustrate pipes and filters.

#Shell script to illustrate pipes and filters

clear

echo The file2.txt content is

```
cat file2.txt
echo The first line is
cat file2.txt | head -1
echo The last line is
cat file2.txt | tail -1
echo The line by line content is
cat file2.txt | more -1
echo give all permissions to all users for file2.txt
chmod a+rwX file2.txt
ls -l file2.txt
touch file1.txt
echo give all permissions to all users for file1.txt
chmod 777 file1.txt
ls -l file1.tx
```

Write and execute a shell script to do the following.

7. To illustrate text processing commands.

#Shell script to illustrate text processing commands

```
clear
```

```
echo The file3.txt content is
```

```
cat file3.txt
```

```
echo The file3.txt content after sorting
```

```
sort -n file3.txt
```

```
echo The uniq content of file3.txt
```

```
uniq file3.txt
```

```
echo The file3.txt size is
```

```
ls -l file3.txt | cut -d " " -f5
```

```
echo Check 3 is present in file3.txt or not
```

```
grep 3 file3.txt
```

```
echo File3.txt statistics is
```

```
wc file3.txt
```

```
echo Replace Digits with A in file3.txt
```

```
tr "0-9" "A" < file3.txt
```

```
echo Insert line numbers in a file3.txt
```

```
nl file3.txt
```

Write and execute a shell script to do the following.

8. To illustrate exec command.

#Shell script to illustrate exec command

```
exec > execoutput.txt
```

```
pwd
```

```
cal
```

exit

Write and execute a shell script to do the following.

9. To illustrate Memory Management commands.

#Shell script to illustrate Memory Management commands

clear

nohup bash -c 'cal && ls' > output.txt

ps -T

top -H | head

free -m | head

cat /proc/meminfo | head

vmstat

Write and execute a shell script to do the following.

10. To check word is present in a sentence or not.

#Shell script to check word is present in a sentence or not.

clear

echo Enter Main String Separated by space

read str

echo Enter Search String

read key

for word in \$str

do

if [ \$key = \$word ]

then

echo Element Present

exit

fi

done

echo Element NOT Present

Write and execute a shell script to do the following.

11. To Read the contents of a file and display the same on Screen (Demo cat command).

#Read the contents of a file and display the same on Screen (Demo cat command).

clear

read -p "Enter file name : " filename

echo The content of \$filename is

while read line

do

echo \$line

done < \$filename

Write and execute a shell script to do the following.

12. To Count number of lines, words, and Characters in given file.

#Count number of lines, words, and Characters in given file.

echo Enter the filename

read file

c=`cat \$file | wc -c`

w=`cat \$file | wc -w`

l=`grep -c "." \$file`

echo Content of the address file

cat address

echo Number of characters in \$file is \$c

echo Number of words in \$file is \$w

echo Number of lines in \$file is \$l

Write and execute a shell script to do the following.

13. To illustrate network management commands.

#Shell script to illustrate network management commands.

clear

echo Memory Consumption statistics

free

echo Display available interfaces.

ifconfig -a | head

echo Display short list available interfaces.

ifconfig -s | head

echo List all tcp ports.

netstat -at | head

echo List statistics for all ports.

netstat -s | head

echo Kernel Routing Information

netstat -r | head

Write and execute a shell script to do the following.

14. To illustrate system maintenance and storage commands.

#Shell script to illustrate system maintenance and storage commands.

clear

echo Running process details are

top | head

echo Disk space information

df | head

echo Display processor information

cat /proc/cpuinfo | head

echo Display memory statistic

cat /proc/meminfo | head

echo Lists out all the storage blocks, which includes disk partitions and optical drives.

lsblk | head