A. Use of appropriate command to determine your login shell.

```
sonali@sonali-VirtualBox:~/Desktop$ echo $SHELL
/bin/bash
```

SYNTAX- \$echo \$SHELL

The \$SHELL variable contains the name of the default shell. This approach works in most cases, It is not reliable way since the currently running Shell may not be the default shell.

B. To find all available shells in your system type by using appropriate command.

```
sonali@sonali-VirtualBox:~/Desktop$ cat /etc/shells
# /etc/shells: valid login shells
/bin/sh
/bin/bash
/usr/bin/rbash
/usr/bin/rbash
/usr/bin/rbash
/usr/bin/sh
/bin/dash
/bin/dash
```

SYNTAX- \$cat /etc/shells

To list available valid login shell for used at time.

€. Use the /etc/passwd file to verify the result of part (B).

```
sonali@sonali-VirtualBox:~/Desktop$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
```

SYNTAX- \$cat /etc/passwd

This file stores essential information required during logging. It is a plain text file containing a list of

systems account and giving for each account some useful information. For example. ID, group ID, home directory, shell and more.

D. Use the date and who commands, in one line, such that the output of date is displayed on the screen and the output of who is redirected to a file. Use the more command to check the content of that file.

```
sonali@sonali-VirtualBox:~/Desktop$ date
Monday 10 October 2022 06:11:09 AM IST
sonali@sonali-VirtualBox:~/Desktop$ date | who | cat >> 4.txt
sonali@sonali-VirtualBox:~/Desktop$ more 4.txt
sonali tty2 2022-10-10 06:06 (tty2)
sonali tty2 2022-10-10 06:06 (tty2)
```

```
SYNTAX- $date +"%d %m %Y"
$who >file
$more file
```

E. Write a sed command that swaps the first and second words in each line in a file.

```
sonali@sonali-VirtualBox:~/Desktop$ cat 5.txt
ALAN 67:90 L001
CARL 98:56 L004
JEFF 45:12 L009
sonali@sonali-VirtualBox:~/Desktop$ sed -e "s/\([^ ]*\) *\([^ ]*\)/\2 \1 /g" 5.txt
67:90 ALAN L001
98:56 CARL L004
45:12 JEFF L009
```

SYNTAX- $sed -e "s/([^]*\) *\([^]*\)/\2 \1 /g" file$

Swap of first word with the second one in every line.

```
sonali@sonali-VirtualBox: ~/Desktop
                                                              Q
sonali
         tty2
                      2022-10-10 06:06 (tty2)
sonali@sonali-VirtualBox:~/Desktop$ date +"current date:%d%ncurrent year:%Y%ncurre
nt month:%m%n" ; who ><4.txt>
bash: syntax error near unexpected token `<'
sonali@sonali-VirtualBox:~/Desktop$ date +"current date:%d%ncurrent year:%Y%ncurre
nt month:%m%n" ; who >4.txt
current date:10
current year:2022
current month:10
sonali@sonali-VirtualBox:~/Desktop$ date +"current date:%d%ncurrent year:%Y%ncurre
nt month:%m%n" ; who > 4.txt
current date:10
current year:2022
current month:10
sonali@sonali-VirtualBox:~/Desktop$ date +"current date:%d%ncurrent year:%Y%ncurre
nt month:%m%n" ;who > 4.txt
current date:10
current year:2022
current month:10
sonali@sonali-VirtualBox:~/Desktop$ date
Monday 10 October 2022 06:11:09 AM IST
sonali@sonali-VirtualBox:~/Desktop$ date | who | cat >> 4.txt
sonali@sonali-VirtualBox:~/Desktop$ more 4.txt
sonali tty2
                      2022-10-10 06:06 (tty2)
                      2022-10-10 06:06 (tty2)
sonali
        tty2
sonali@sonali-VirtualBox:~/Desktop$ A
```