Experiment 2:- Use of appropriate command to determine your shell, available shells, using 'who' command and redirect the to any text file, 'more' to view content in files.

- (a) Use of appropriate command to determine your logic shell.
- → To find your current shell type following command

$$E.g. = OS_2.1$$

- (b) To find all available shells in your system type which command.
- → To find all available shells type command:

$$E.g. = OS_2.2$$

- (c) Which command is use to verify the result of part (b).
- To verify the result of step(b) use the following command:
 -\$ cat /etc/passwd

$$E.g. = 2.3.0$$

- (d) Use the "who" command and redirect the result to a file called myfile1. Use the more command to see the contents of myfile1.
- Command typed is: \$ who -H > myfile1.txt \$ more -d myfile1.txt

$$E.g. = OS_2.4$$

- (e) Use the date and who commands in sequence (in one line) such that the output date will display on the screen and the output of who will be redirected to a file called myfile2. Use the more command to check the contents of myfile2.
- → Command typed is: -\$ date; who -H > myfile2.txt -\$ more -d myfile2.txt.

$$E.g. = OS_2.5$$

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

 \rightarrow Command typed is :\$ sed -s "s/\([^]*\) *\([^]*\)/\2 \1 /g" text.txt

 $E.g. = OS_2.6.2$

```
File Actions Edit View Help

(p1619® kali)-[~]
$ echo $SHELL
/usr/bin/zsh

(p1619® kali)-[~]
$ cat /etc/shells
# /etc/shells: valid login shells
/bin/sh
/bin/bash
/usr/bin/bash
/usr/bin/bash
/usr/bin/dash
/usr/bin/dash
/usr/bin/gash
/usr/bin/gash
/usr/bin/gash
/usr/bin/gash
/usr/bin/gash
/usr/bin/gash
/usr/bin/zsh
/usr/bin/zsh
/usr/bin/zsh
/usr/bin/zsh
/usr/bin/zsh
/usr/bin/zsh
/usr/bin/screen
```

```
p1619@kali: ~
File Actions Edit View Help
└$ cat /etc/passwd
root:x:0:0:root:/root:/usr/bin/zsh
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
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
_apt:x:100:65534::/nonexistent:/usr/sbin/nologin
systemd-network:x:101:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:102:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
mysql:x:103:110:MySQL Server,,,:/nonexistent:/bin/false
tss:x:104:111:TPM software stack,,,:/var/lib/tpm:/bin/false
strongswan:x:105:65534::/var/lib/strongswan:/usr/sbin/nologin
systemd-timesync:x:106:112:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
uuidd:x:107:113::/run/uuidd:/usr/sbin/nologin
redsocks:x:108:114::/var/run/redsocks:/usr/sbin/nologin
rwhod:x:109:65534::/var/spool/rwho:/usr/sbin/nologin
iodine:x:110:65534::/run/iodine:/usr/sbin/nologin
messagebus:x:111:115::/nonexistent:/usr/sbin/nologin
miredo:x:112:65534::/var/run/miredo:/usr/sbin/nologin
usbmux:x:113:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
tcpdump:x:114:121::/nonexistent:/usr/sbin/nologin
sshd:x:115:65534::/run/sshd:/usr/sbin/nologin
xrdp:x:116:123::/run/xrdp:/usr/sbin/nologin
rpc:x:117:65534::/run/rpcbind:/usr/sbin/nologin
dnsmasq:x:118:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
statd:x:119:65534::/var/lib/nfs:/usr/sbin/nologin
avahi:x:120:127:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
stunnel4:x:999:999:stunnel service system account:/var/run/stunnel4:/usr/sbin/nologin
rtkit:x:121:128:RealtimeKit,,,:/proc:/usr/sbin/nologin
Debian-snmp:x:122:129::/var/lib/snmp:/bin/false
speech-dispatcher:x:123:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
sslh:x:124:130::/nonexistent:/usr/sbin/nologin
postgres:x:125:132:PostgreSQL administrator,,,:/var/lib/postgresql:/bin/bash
nm-openvpn:x:126:133:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
inetsim:x:127:135::/var/lib/inetsim:/usr/sbin/nologin
geoclue:x:128:136::/var/lib/geoclue:/usr/sbin/nologin
nm-openconnect:x:129:137:NetworkManager OpenConnect plugin,,,:/var/lib/NetworkManager:/usr/sbin/nologin
lightdm:x:130:138:Light Display Manager:/var/lib/lightdm:/bin/false
pulse:x:131:139:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
saned:x:132:142::/var/lib/saned:/usr/sbin/nologin
colord:x:133:143:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
king-phisher:x:134:144::/var/lib/king-phisher:/usr/sbin/nologin
p1619:x:1000:1000:p1619,,,:/home/p1619:/usr/bin/zsh
```

(p1619@ kali)-[~] \$ cat /etc/passwd root:x:0:0:root:/root:/usr/bin/zsh 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

```
colord:x:133:143:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
king-phisher:x:134:144::/var/lib/king-phisher:/usr/sbin/nologin
p1619:x:1000:1000:p1619,,,:/home/p1619:/usr/bin/zsh
  [p1619⊗ kali)-[~/Desktop/Files/Folder]
$ who -H > myfile1.txt
  (p1619@kali)-[~/Desktop/Files/Folder]

$ more -d myfile1.txt

NAME LINE TIME COM
                                                          COMMENT
  p1619
                                  2022-09-28 21:34 (:0)
            tty7
 (p1619⊗ kali)-[~/Desktop/Files/Folder]

$ date ; who -H > myfile2.txt

Wednesday 28 September 2022 10:12:29 PM IST
  (p1619@kali)-[~/Desktop/Files/Folder]
$ more -d myfile2.txt
NAME LINE TIME COM
  NAME
                          TIME
  p1619
                                 2022-09-28 21:34 (:0)
  [ p1619⊗ kali)-[~/Desktop/Files/Folder] cat text.txt
 Hello World
 This is a test file.
  To check commands.
 This is linux os.
(p1619@ kali)-[~/Desktop/Files/Folder]
$ sed -s "s/\([^ ]*\) *\([^ ]*\)/\2 \1 /g" text.txt
World Hello
 is This a test file.
 check To commands.
 is This linux os.
```