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Experiment 2:

- Use of appropriate command to determine your login shell.

  ➔ $ echo $SHELL

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

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

  ➔ $ cat /etc/shells

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

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

  ➔ $ cat /etc/passwd

```
rohin@rohin-VirtualBox:~/new$ 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
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105::/nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:112:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:115::/run/uuidd:/usr/sbin/nologin
systemd-oom:x:108:116:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:117::/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin
avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
whoopsie:x:117:124::/nonexistent:/bin/false
sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
nm-openvpn:x:120:126:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned:x:121:128::/var/lib/saned:/usr/sbin/nologin
colord:x:122:129:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:123:130::/var/lib/geoclue:/usr/sbin/nologin
pulse:x:124:131:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:125:65534::/run/gnome-initial-setup/:/bin/false
hplip:x:126:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:127:133:Gnome Display Manager:/var/lib/gdm3:/bin/false
rohin:x:1000:1000:Rohin Sabharwal,,,:/home/rohin:/bin/bash
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
```

- 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.

  ➔ date +"Current Year is :%y%nCurrent Month is :%m%nCurrent Date is :%d " ; who> <filename>

```
rohin@rohin-VirtualBox:~/new$ who >a.txt
rohin@rohin-VirtualBox:~/new$ date +"Current Year Is: %y%nCurrent Month Is: %m%nCurrent Date Is: %d "; who>a.xt
Current Year Is: 22
Current Month Is: 10
Current Date Is: 09
rohin@rohin-VirtualBox:~/new$ nano a.txt
rohin@rohin-VirtualBox:~/new$
```

```
  GNU nano 6.2                                                    a.txt
rohin    tty2          2022-10-09 14:41 (tty2)
```

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

  ➔ $ sed <optional parameter> <script> <input filename>

```
rohin@rohin-VirtualBox:~/new$ sed 's/Rohin/Chaahat/g' a.txt
Arhaan Manvi
Chaahat Mohit
Akash Puroht
rohin@rohin-VirtualBox:~/new$
```