

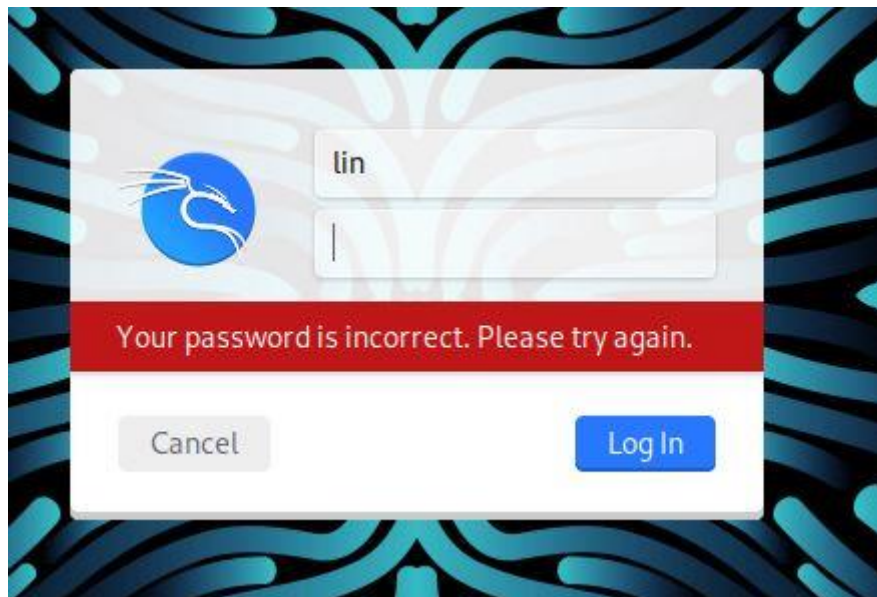
Basic Linux Commands Assignments

Assignment-1

Connect and disconnect with login Access

- What happens when you login a non-existent users or username?

Ans: Not able to login because the user or username details are not available in /etc/passwd



Assignment-2 Password changing

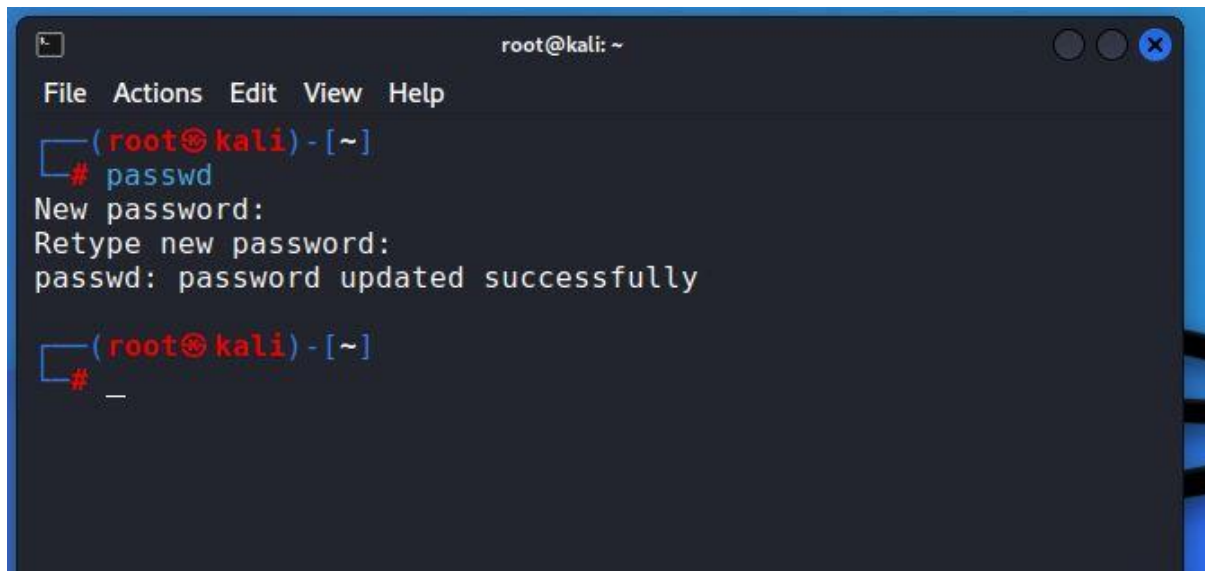
- Login into your account and then change password?
 - Change your password into ***IneuR0n#42*** and hit the **Enter** key
 -

Ans: login into account and then password to ***IneuR0n#42***. *It change the password in /etc/shadowfile and update the new password*

```
root@kali: ~  
File Actions Edit View Help  
(root@kali) - [~]  
# passwd  
New password:  
Retype new password:  
passwd: password updated successfully  
(root@kali) - [~]  
# _
```

Try again to change password but use like password **1234** or **abcd**

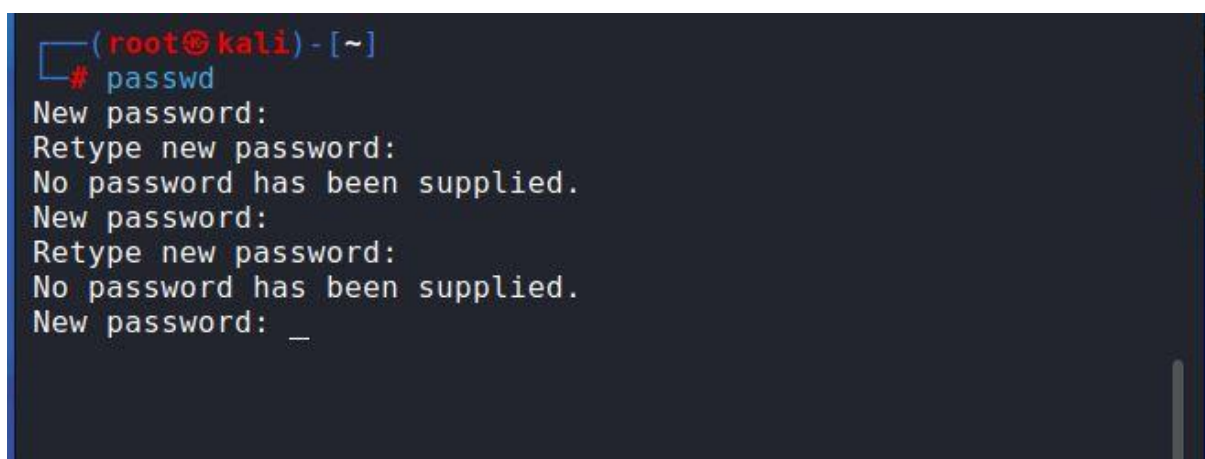
Ans: by changing password to 1234 it updates the new password

A terminal window titled 'root@kali: ~' with a menu bar (File, Actions, Edit, View, Help). The prompt is '(root@kali) - [~]'. The user enters '# passwd'. The terminal displays 'New password:', 'Retype new password:', and 'passwd: password updated successfully'. The prompt returns to '(root@kali) - [~]'.

```
(root@kali) - [~]
# passwd
New password:
Retype new password:
passwd: password updated successfully
(root@kali) - [~]
```

Try again to change password but now don't use any password just hit Enter key

Ans: by using passwd and no password use it shows that need to enter password, it will not allow user without password. Other method **passwd -d username** can be use to remove password

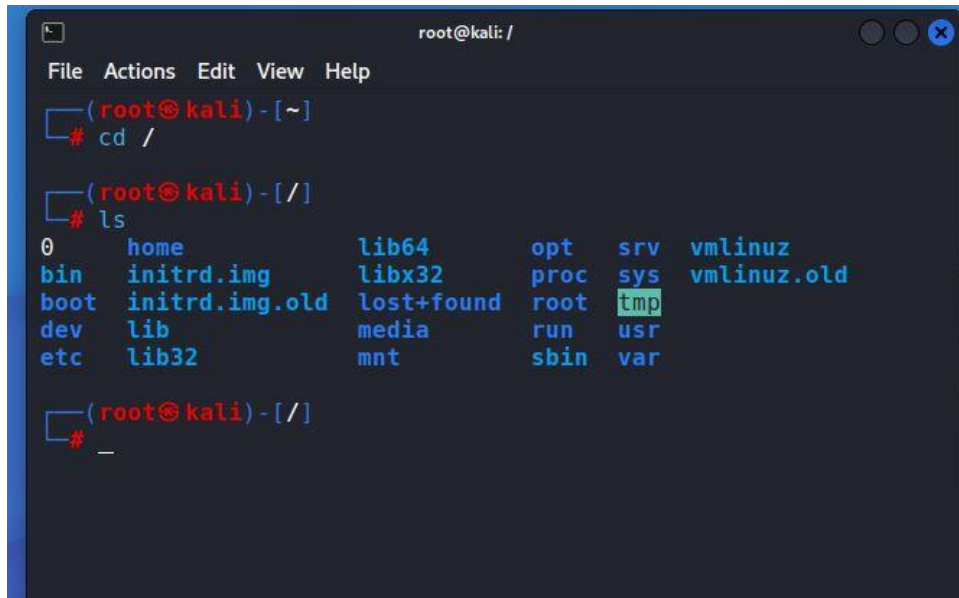
A terminal window titled 'root@kali: ~' with a menu bar (File, Actions, Edit, View, Help). The prompt is '(root@kali) - [~]'. The user enters '# passwd'. The terminal displays 'New password:', 'Retype new password:', and 'No password has been supplied.' twice. The prompt returns to '(root@kali) - [~]'.

```
(root@kali) - [~]
# passwd
New password:
Retype new password:
No password has been supplied.
New password:
Retype new password:
No password has been supplied.
New password: _
```

Assignment-3 Working with Directories

- Enter the command **cd /** and then **ls** and then hit **Enter** key

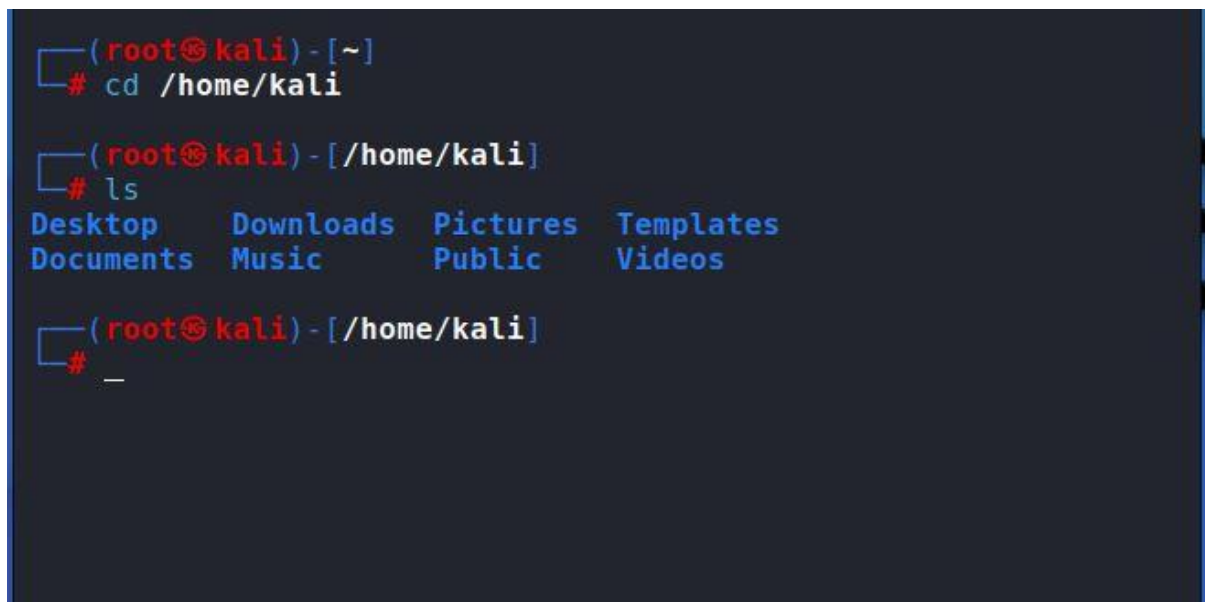
Ans: we got the different Linux directory structure. As **cd /** change to root directory and **ls** command gives the list of directory



```
root@kali: /  
File Actions Edit View Help  
(root@kali) - [~]  
# cd /  
  
(root@kali) - [/]  
# ls  
0      home      lib64      opt      srv      vmlinuz  
bin    initrd.img  libx32     proc     sys      vmlinuz.old  
boot   initrd.img.old  lost+found  root     tmp  
dev    lib         media      run      usr  
etc    lib32       mnt        sbin     var  
  
(root@kali) - [/]  
# _
```

Enter the command now **cd /home** and then hit **Enter** key

Ans: A home directory is a file system directory on a multi-user operating system containing files for a given user of the system.



```
(root@kali) - [~]  
# cd /home/kali  
  
(root@kali) - [/home/kali]  
# ls  
Desktop    Downloads  Pictures   Templates  
Documents  Music      Public     Videos  
  
(root@kali) - [/home/kali]  
# _
```

Enter **cd ..** and hit **Enter** key

Ans: Using **cd ..** it go back to the directory

```
(root@kali) - [/home/kali]
# cd ..

(root@kali) - [/home]
# _
```

Now enter **cd /var/www/html** and then type **cd** and hit **Enter** key

Ans: it go back to the root user

```
(root@kali) - [/home]
# cd /var/www/html

(root@kali) - [/var/www/html]
# cd

(root@kali) - [~]
# _
```

Now type **cd /root** and then hit **Enter** key

Ans: no we do not have output, it is same as previous one

Assignment-4 Working with File Listing

Go to **cd /etc** and type **ls**

```
File Actions Edit View Help
(root@kali) - [~]
# cd /etc

(root@kali) - [/etc]
# ls
adduser.conf      dbus-1          group-grub.d    kernel          mime.types      openvpn          rc5.d            smartd.conf      timidity
adduser.conf.dpkg-save  dconf          grub.d          kernel-img.conf miniconf        opt              rc6.d            smartmontools    tftpd
alsa              debconf.conf   gshadow         keyutils        miredo          os-release       rcS.d            smi.conf         ucf.conf
alternatives      debian.version  gshadow         king-phisher    mke2fs.conf     pam.conf         rear.cfg         snmp             udev
apache2           default        gss             kismet          ModemManager    papersize        request-key.conf sqlmap           udisks2
apparmor          dhcp           gtk-2.0         ld.so.cache     madprobe.d      passw            request-key.d    ssh             ufw
apparmor.d        dictionaries-common  gtk-3.0         ld.so.conf.d    modules          passwd           resolv.conf     ssl             updatedb.conf
apt               dpkg           hdparm.conf     libao.conf      modules-load.d  perl            responder        sslsplit         UPower
avahi             dns2tcpd.conf  hosts           libaudit.conf   motd             php              rmt              strongswan.conf vdpau_wrapper.cfg
bash.bashrc       dpkg           hosts           libblockdev     mysql            plymouth         rpc              strongswan.d     vdm
bash_completion   e2scrub.conf  hosts.allow     libl3           nanorc           polkit-1         rsyslog.conf    stanza           vpnc
bindresvport.blacklist  emacs          hosts.deny      libltdb         netconfig        postgresql       rsyslog.d       subgid           vulkan
binfmt.d          environment    ifplugd         libltdb         netsniff-ng      postgresql-common  runit           subuid           wgetrc
bluetooth         envsubst       inetsim         libltdb         network          powershell-empire  samba           subuid           wireshark
ca-certificates   ethtool       init.d          libltdb         NetworkManager  profile          sane.d           subversion       wpasupplicant
chatscripts       firebird      initscripts     libltdb         nftables.conf   profile.d         scalpel          sudo.conf        X11
cifs-utils        firefo-esr    ipsec.conf      libltdb         nftables.conf   protocols         screenrc         sudoers          xattr.conf
cloud             freetds       ipsec.conf      libltdb         nftables.conf   proxychains4.conf  sensors.d        sudo_logsrvd.conf xdg
console-setup     fuse.conf     ipsec.conf      libltdb         nftables.conf   pulse            selinux          sysctl.conf      xdg
cron              fstab         ipsec.conf      libltdb         nftables.conf   python2.7         sensors3.conf   sysctl.d         xfce4
cron.daily        gac.conf     ipsec.conf      libltdb         nftables.conf   python3.10        services         sysstat          xrdp
cron.hourly       gac.conf     ipsec.conf      libltdb         nftables.conf   python3.9         shadow          systemd          xz
cron.monthly      gac.conf     ipsec.conf      libltdb         nftables.conf   rc0.d             shells          tightvncserver.conf
crontab           gac.conf     ipsec.conf      libltdb         nftables.conf   rc1.d             skel             time
cron.weekly       gac.conf     ipsec.conf      libltdb         nftables.conf   rc2.d             skel             time
cryptsetup-initramfs  gac.conf     ipsec.conf      libltdb         nftables.conf   rc3.d             skel             time
cryptsetup-ntfs     gac.conf     ipsec.conf      libltdb         nftables.conf   rc4.d             skel             time
cryptsetup-ntfs     gac.conf     ipsec.conf      libltdb         nftables.conf   rc4.d             skel             time
crypttab           gac.conf     ipsec.conf      libltdb         nftables.conf   rc4.d             skel             time
```


Ans: system configuration, grep config files for the system, boot

time loading scripts, apache2, dpkg, crontab, fstab device storage tables, and the passwd user accounts file.

Then type ls -al and hit Enter key

Ans: Displays the mode, owner, group, size (in bytes), and time of last modification for each file.

```
(root@kali) - [ /etc ]
# ls -al
total 1332
drwxr-xr-x 159 root root 12288 Dec 17 05:33 .
drwxr-xr-x 19 root root 4096 Oct 27 23:09 ..
-rw-r--r-- 1 root root 3623 Oct 26 20:15 adduser.conf
-rw-r--r-- 1 root root 3609 Oct 26 20:15 adduser.conf.dpkg-save
drwxr-xr-x 3 root root 4096 Oct 26 20:23 alsa
drwxr-xr-x 2 root root 20480 Oct 27 23:35 alternatives
drwxr-xr-x 8 root root 4096 Oct 26 20:46 apache2
drwxr-xr-x 2 root root 4096 Oct 26 20:18 apparmor
drwxr-xr-x 9 root root 4096 Oct 26 20:52 apparmor.d
drwxr-xr-x 8 root root 4096 Oct 26 20:59 apt
drwxr-xr-x 3 root root 4096 Oct 26 20:41 avahi
-rw-r--r-- 1 root root 1994 May 12 2022 bash.bashrc
-rw-r--r-- 1 root root 45 Jan 24 2020 bash_completion
drwxr-xr-x 2 root root 4096 Oct 26 20:44 bash_completion.d
-rw-r--r-- 1 root root 367 Jul 29 2019 bindresvport.blacklist
drwxr-xr-x 2 root root 4096 Jun 28 14:33 binfmt.d
drwxr-xr-x 2 root root 4096 Oct 26 20:40 bluetooth
drwxr-xr-x 3 root root 4096 Oct 26 20:22 ca-certificates
-rw-r--r-- 1 root root 5529 Oct 26 20:38 ca-certificates.conf
drwxr-s-- 2 root dip 4096 Oct 26 20:38 chatscripts
drwxr-xr-x 2 root root 4096 Oct 26 20:43 cifs-utils
drwxr-xr-x 3 root root 4096 Oct 26 20:31 cloud
drwxr-xr-x 2 root root 4096 Oct 26 20:18 console-setup
drwxr-xr-x 2 root root 4096 Oct 26 20:43 cron.d
drwxr-xr-x 2 root root 4096 Oct 26 20:48 cron.daily
drwxr-xr-x 2 root root 4096 Oct 26 20:16 cron.hourly
```

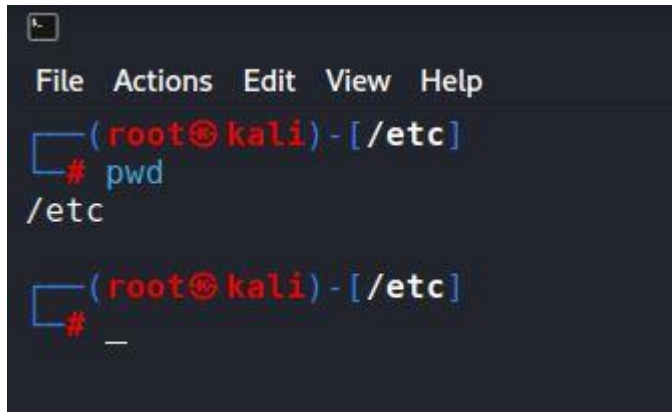
Then use ls -li and hit Enter key

Ans: Displays the i-node number in the first column of the report for each file.

```
(root@kali) - [ /etc ]
ls -li
2093206 adduser.conf 2094255 environment.d 2094285 java-ll-openjdk 2093313 nanoirc 2093132 rc1.d 2094148 strongswan.d
2093230 adduser.conf.dpkg-save 2093304 ethertypes 2094324 john 2093308 netconfig 2093133 rc2.d 2094210 tunnel
2094092 alsa 2094347 ethercap 2093106 kernel 2094035 netconf-ng 2093134 rc3.d 2111114 subgid
2093062 alternatives 2094373 firebird 2111106 kernel-img.conf 2093206 network 2093135 rc4.d 2093220 subgid
2093043 apache2 2094378 firefoz-esr 2094050 keyutils 2094534 NetworkManager 2093136 rc5.d 2111113 subuid
2093424 apparmor 2093824 fonts 2094664 kimg-phisher 2093345 networks 2093137 rc6.d 2111037 subuid
2093426 apparmor.d 2094381 freeradius 2094557 kismet 2108720 nfs.conf 2093138 rc5.d
2093073 apt 2093050 fstab 2093800 ls-se.conf.d 2093314 ntfs.conf 2094244 rearj.cfg 2094215 sudo.conf
2093808 avahi 2094056 fuse.conf 2093145 ld.so.conf 2094590 nginx 2094578 redsocks.conf 2094217 sudoers
2093122 bash.bashrc 2093144 gnl.conf 2093800 lib-se.conf.d 2094567 ntko.conf 2094051 request-key.conf 2094218 supersd
2094220 bash_completion 2094384 openssl 2094781 libao.conf 2098926 nsaswitch.conf 2094052 request-key.d
2094322 bash_completion.d 2094081 ghostscript 2093072 libaudit.conf 2094784 nscDataSources 2108564 resolv.conf 2094068 sv
2093142 bindresvport.blacklist 2093918 alvms 2094409 libblockdev 2094785 odbcc.ini 2094570 responder 2093110 sysctl.conf
2093215 binfmt.d 2094236 libnl-3 2094236 libnl-3 2098983 odbccinst.ini 2093241 rmt 2093234 sysctl.d
2093815 bluetooth 2094224 cgroup 2094261 libpaper.d 2094395 apennal 2093300 rpc 2095175 systat
2094044 ca-certificates 2111124 group 2094476 lightdm 2094415 OpenCL 2093322 rsyslog.conf 2093139 systemd
2099212 ca-certificates.conf 2103721 group 2094431 lightdm 2094728 openfortivpn 2093323 syslog.conf 2093161 terminfo
2094711 chatscripts 2111061 grub.d 2108571 locale.allias 2094397 openniz 2094063 runit 2094021 theHarvester
2094316 cifs-utils 2111125 gshadow 2093400 locale.gen 2094126 samba 2094699 tightvncserver.conf
2094438 cloud 2093283 gshadow 2093178 apt 2093027 sane.d 2093191 timezone
2093058 console-setup 2093270 gss 2093318 logcheck 2093226 as-release 2094581 scalpel 2094393 timidity
2093127 cron.d 2094410 gtk-2.0 2093129 login.defs 2092147 pam.conf 2094652 screenrc 2093245 tmppfiles.d
2093064 cron.daily 2094259 gtk-3.0 2093310 logrotate.conf 2093148 baa.d 2094477 xdmx.conf.d
2093206 cron.hourly 2094487 gupdater 2093049 logrotate.d 2094049 papersize 2094252 searchsploit_rc
2093262 cron.monthly 2094399 hdpam.conf 2093256 machanger 2093204 passwd 2093877 security 2094412 wksk2
2093266 crontab 2093114 host.conf 2093256 machine-id 2093204 passwd 2093151 selinux 2094070 urfw
2093264 cron.weekly 2093171 hostname 2094222 magic 2093138 perl 2094651 updatedb.conf 2094651 updatedb.conf
2094341 cryptsetup-initramfs 2093344 hosts 2094223 magic.mime 2094584 php 2093920 sensors.d 2093119 update-motd.d
2094343 cryptsetup-mke-passwd 2099496 hosts.allow 2101658 mailcap 2094470 elasticsearch 2093307 services 2094547 UPower
2094337 crypttab 2099497 hosts.deny 2093642 mailcap.order 2094269 polkit-1 2093150 sgml 2094091 vdpau.wrapper.cfg
2093172 dbus-1 2109719 ldmapd.conf 2094230 manpath.conf 2094334 postgresql 2108572 shadow 2093229 vim
2094252 dcconf 2097463 lftp.conf 2094693 mailplotlibrc 2094329 postgresql-common 2093201 shadow 2094061 vnc
2093076 debconf.conf 2093837 inetsim 2093641 mime.types 2094568 powershell-empire 2092707 shells 2093923 vulkan
2093109 debian version 2093164 init.d 2094634 minicon 2094205 ppp 2093113 xel 2094233 wgetrc
2094434 debtasks 2093403 initramfs-tools 2094937 miredo 2093176 profile 2094402 smartd.conf 2094632 wireshark
2093110 debsync 2094246 lnpuirc 2094039 miredo.conf 2093177 xrdp.d 2094631 smi.conf 2097405 wpa_supplicant
2093089 deluser.conf 2094048 insserv.conf.d 2093138 mke2fs.conf 2093305 protocols 2094631 xmi.conf 2093420 xmi
2093294 dhcp 2094428 ipx-usb 2094707 ModemManager 2094573 proxychains4.conf 2094136 snmp 2093126 xattr.conf
2094245 dictionaries-common 2093272 inroute2 2093183 modprobe.d 2094088 pulse 2094761 speech-dispatcher 2093246 xdg
2093822 dns2tcpd.conf 2094181 ipsec.conf 2093192 modules 2094120 python2.7 2094617 sqlmap 2094510 xfce4
2093006 dpkg 2094182 ipsec.d 2092231 modules-load.d 2099682 python3 2094057 xsh 2094733 xzipped
```

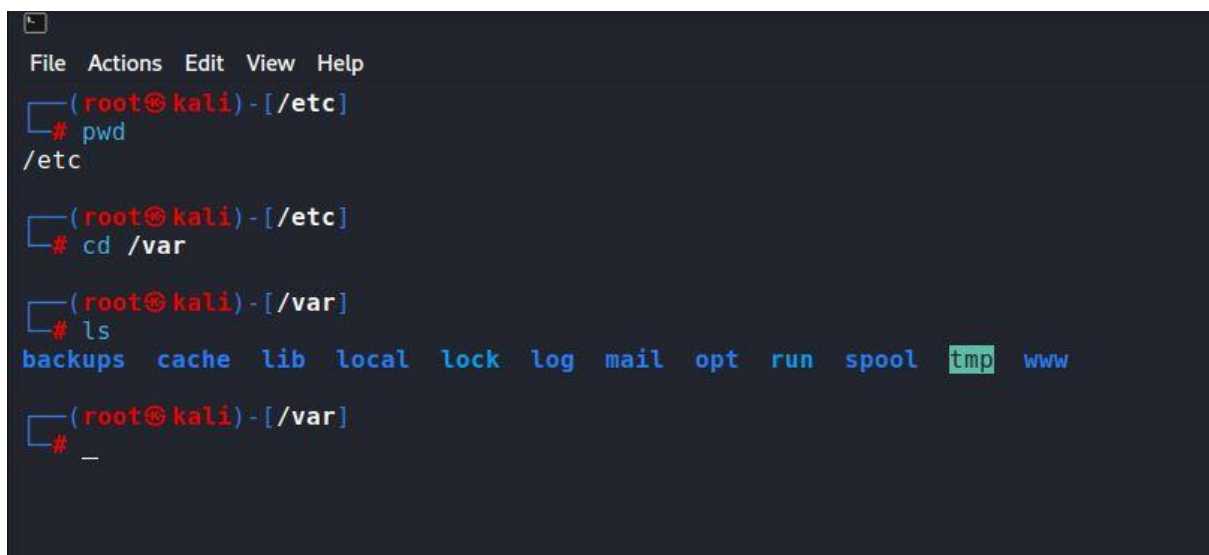
Assignment-5 Know where you are and where you working

Check which location you working, type **pwd** and take screenshot

A terminal window with a dark background and a menu bar (File, Actions, Edit, View, Help). The prompt is (root@kali) - [/etc]. The user enters 'pwd' and the output is '/etc'.

```
(root@kali) - [/etc]
# pwd
/etc
(root@kali) - [/etc]
# _
```

Now use **cd /var** and hit **Enter** key, Do **ls**, and see what output comes, give screenshot?

A terminal window with a dark background and a menu bar (File, Actions, Edit, View, Help). The prompt is (root@kali) - [/etc]. The user enters 'cd /var' and the prompt changes to (root@kali) - [/var]. Then the user enters 'ls' and the output is 'backups cache lib local lock log mail opt run spool tmp www'.

```
(root@kali) - [/etc]
# pwd
/etc
(root@kali) - [/etc]
# cd /var
(root@kali) - [/var]
# ls
backups  cache  lib  local  lock  log  mail  opt  run  spool  tmp  www
(root@kali) - [/var]
# _
```