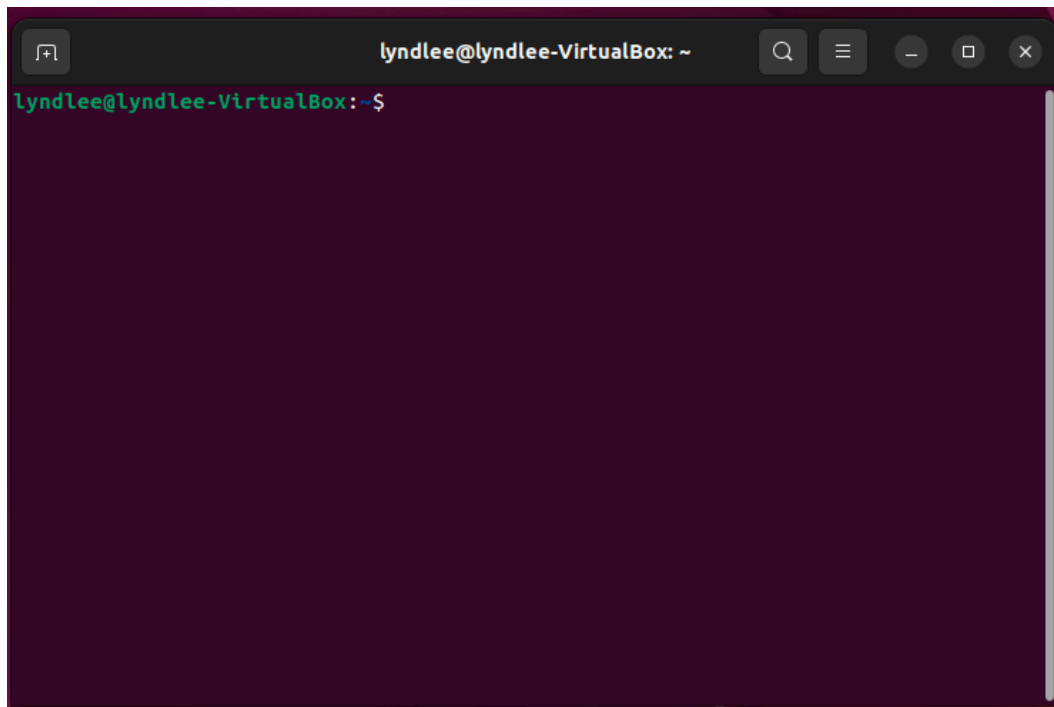
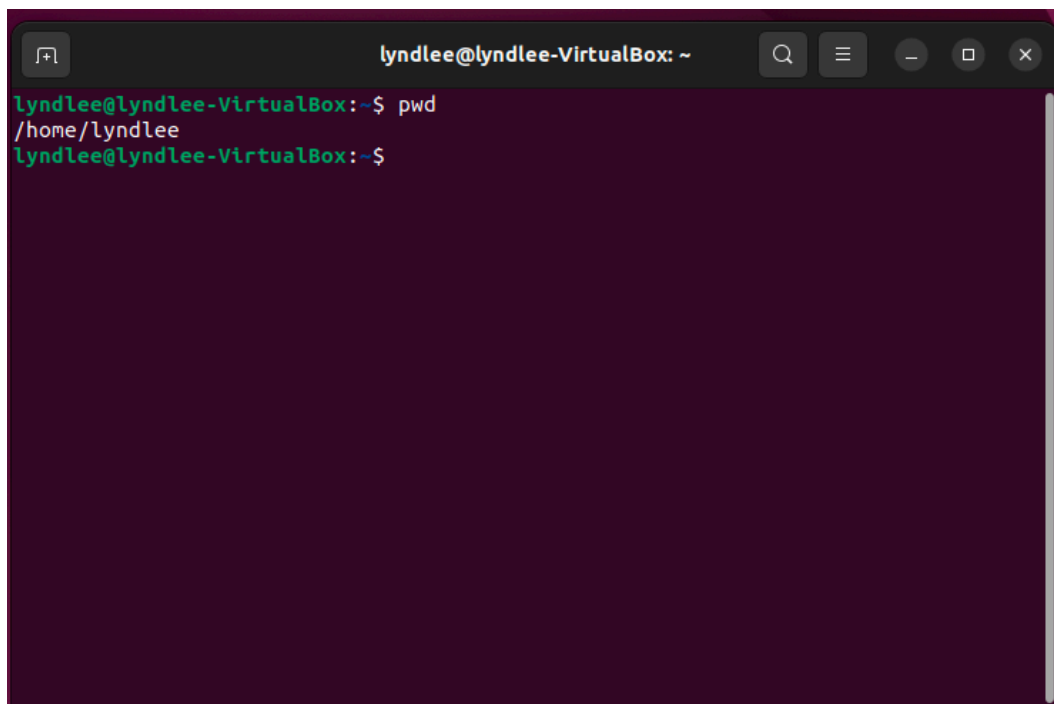


Step 1:



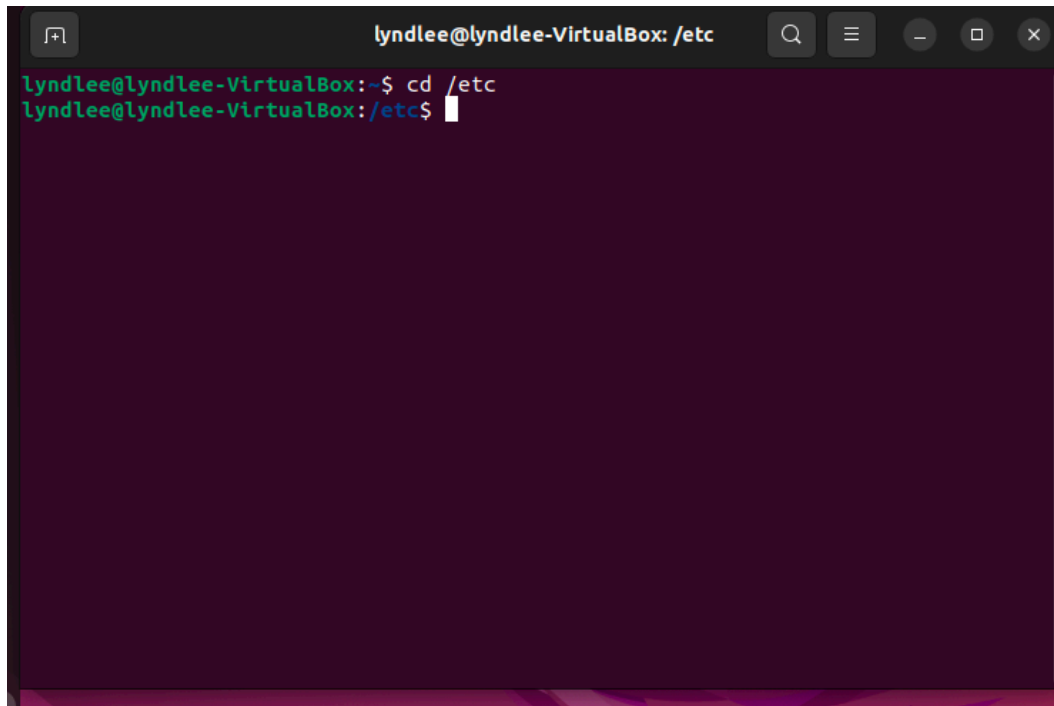
Open a Terminal Window

Step 2:



Display your current working directory

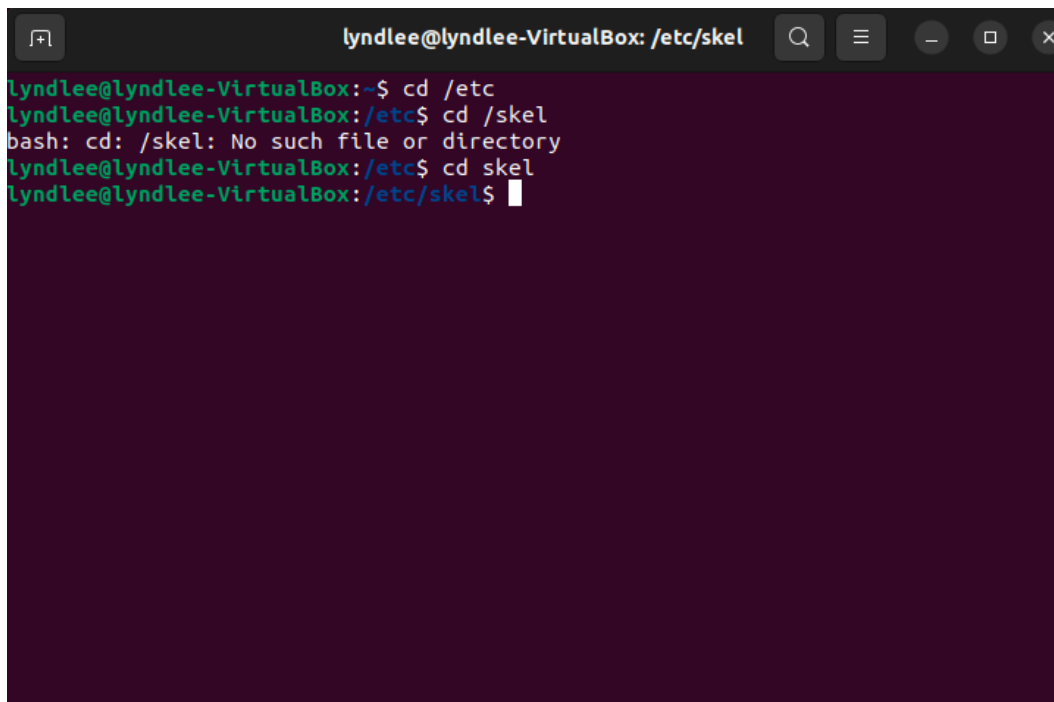
Step 3:

A terminal window titled 'lyndlee@lyndlee-VirtualBox: /etc'. The prompt is 'lyndlee@lyndlee-VirtualBox:~\$'. The user enters 'cd /etc'. The prompt changes to 'lyndlee@lyndlee-VirtualBox:/etc\$' with a cursor at the end.

```
lyndlee@lyndlee-VirtualBox:~$ cd /etc
lyndlee@lyndlee-VirtualBox:/etc$
```

Using an absolute pathname, switch to the /etc directory

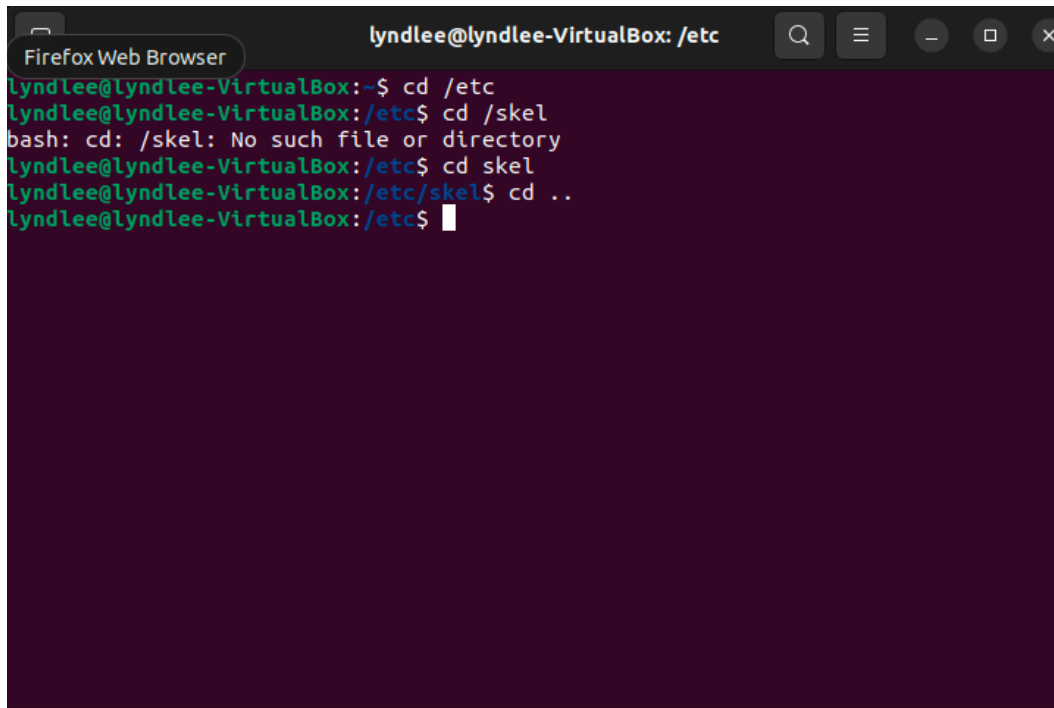
Step 4:

A terminal window titled 'lyndlee@lyndlee-VirtualBox: /etc/skel'. The prompt is 'lyndlee@lyndlee-VirtualBox:~\$'. The user enters 'cd /etc'. The prompt changes to 'lyndlee@lyndlee-VirtualBox:/etc\$'. The user enters 'cd /skel'. The prompt changes to 'bash: cd: /skel: No such file or directory'. The user enters 'cd skel'. The prompt changes to 'lyndlee@lyndlee-VirtualBox:/etc/skel\$' with a cursor at the end.

```
lyndlee@lyndlee-VirtualBox:~$ cd /etc
lyndlee@lyndlee-VirtualBox:/etc$ cd /skel
bash: cd: /skel: No such file or directory
lyndlee@lyndlee-VirtualBox:/etc$ cd skel
lyndlee@lyndlee-VirtualBox:/etc/skel$
```

Using a relative pathname, move to the /etc/skel directory

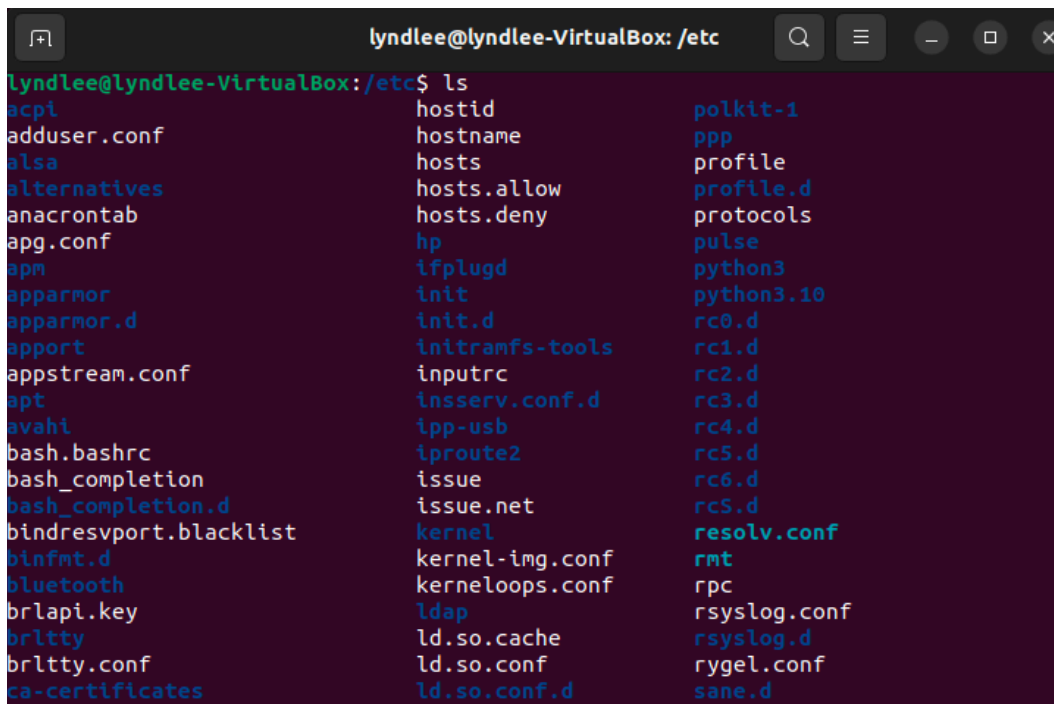
Step 5:



```
lyndlee@lyndlee-VirtualBox: /etc
lyndlee@lyndlee-VirtualBox:~$ cd /etc
lyndlee@lyndlee-VirtualBox:/etc$ cd /skel
bash: cd: /skel: No such file or directory
lyndlee@lyndlee-VirtualBox:/etc$ cd skel
lyndlee@lyndlee-VirtualBox:/etc/skel$ cd ..
lyndlee@lyndlee-VirtualBox:/etc$
```

Using a relative pathname, move up one directory

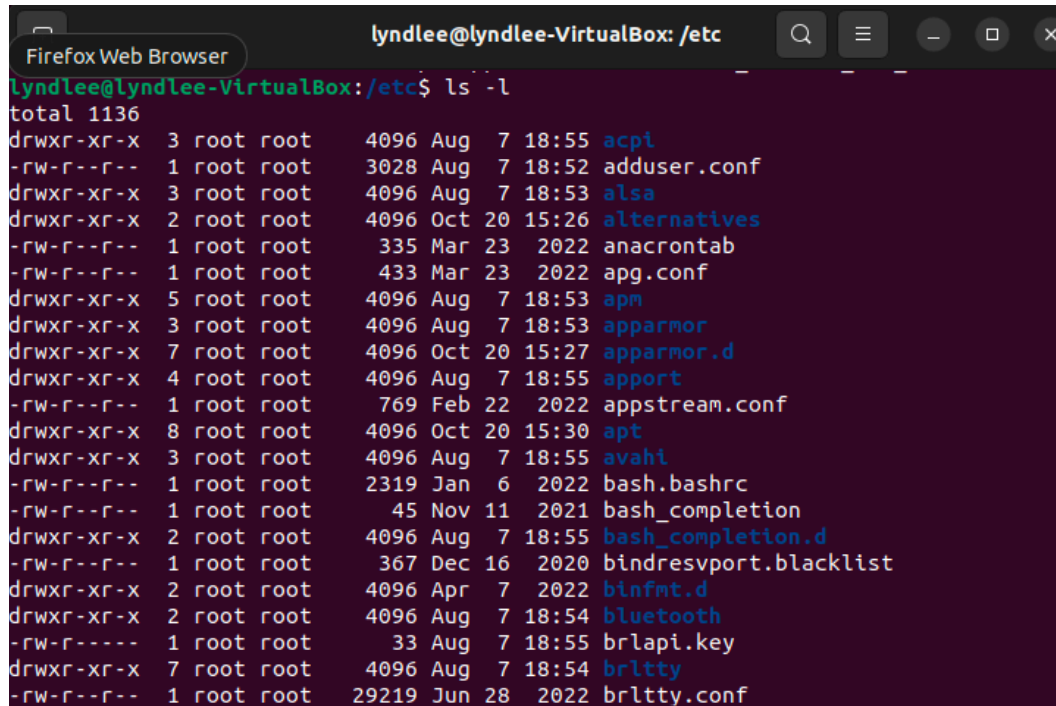
Step 6:



```
lyndlee@lyndlee-VirtualBox: /etc
lyndlee@lyndlee-VirtualBox:/etc$ ls
acpi                  hostid                polkit-1
adduser.conf          hostname              ppp
alsa                  hosts                 profile
alternatives          hosts.allow            profile.d
anacrontab            hosts.deny             protocols
apg.conf              hp                     pulse
apm                   ifplugd                python3
apparmor              init                   python3.10
apparmor.d            init.d                 rc0.d
appport              initramfs-tools        rc1.d
appstream.conf        inputrc                rc2.d
apt                   insserv.conf.d         rc3.d
avahi                 ipp-usb                rc4.d
bash.bashrc           tproute2               rc5.d
bash_completion       issue                  rc6.d
bash_completion.d     issue.net              rcS.d
bindresvport.blacklist kernel                  resolv.conf
binfmt.d              kernel-img.conf        rmt
bluetooth             kerneloops.conf        rpc
brlapi.key            ldap                   rsyslog.conf
brltty                ld.so.cache            rsyslog.d
brltty.conf           ld.so.conf             rygel.conf
ca-certificates       ld.so.conf.d           sane.d
```

List the files in the current directory

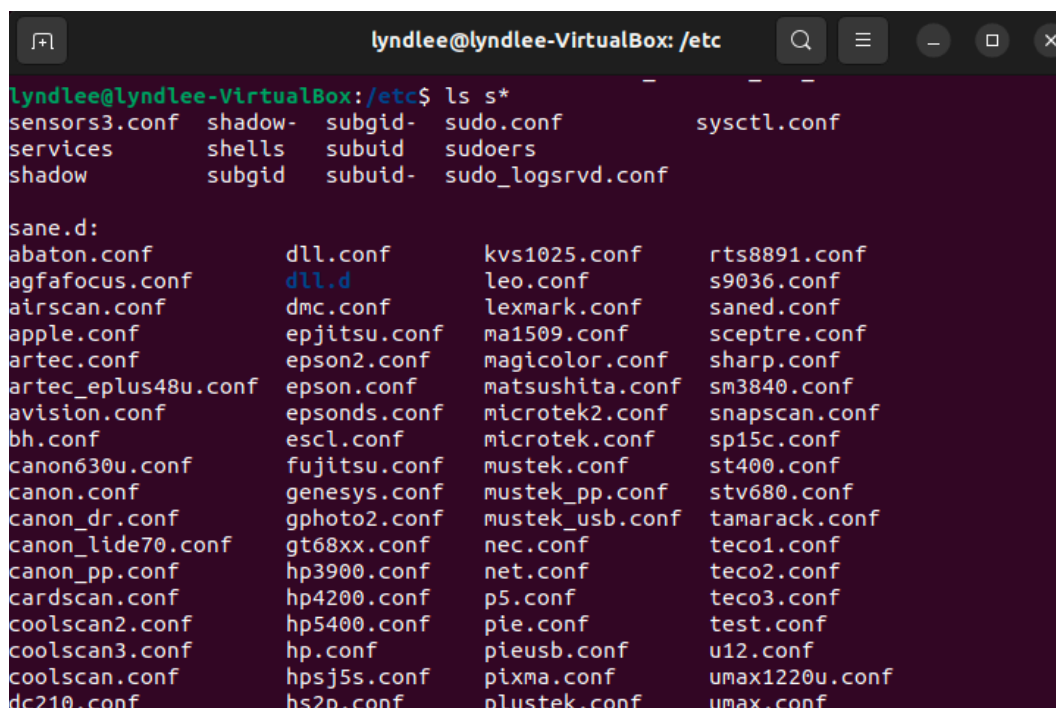
Step 7:



```
lyndlee@lyndlee-VirtualBox: /etc$ ls -l
total 1136
drwxr-xr-x 3 root root 4096 Aug 7 18:55 acpi
-rw-r--r-- 1 root root 3028 Aug 7 18:52 adduser.conf
drwxr-xr-x 3 root root 4096 Aug 7 18:53 alsa
drwxr-xr-x 2 root root 4096 Oct 20 15:26 alternatives
-rw-r--r-- 1 root root 335 Mar 23 2022 anacrontab
-rw-r--r-- 1 root root 433 Mar 23 2022 apg.conf
drwxr-xr-x 5 root root 4096 Aug 7 18:53 apm
drwxr-xr-x 3 root root 4096 Aug 7 18:53 apparmor
drwxr-xr-x 7 root root 4096 Oct 20 15:27 apparmor.d
drwxr-xr-x 4 root root 4096 Aug 7 18:55 apport
-rw-r--r-- 1 root root 769 Feb 22 2022 appstream.conf
drwxr-xr-x 8 root root 4096 Oct 20 15:30 apt
drwxr-xr-x 3 root root 4096 Aug 7 18:55 avahi
-rw-r--r-- 1 root root 2319 Jan 6 2022 bash.bashrc
-rw-r--r-- 1 root root 45 Nov 11 2021 bash_completion
drwxr-xr-x 2 root root 4096 Aug 7 18:55 bash_completion.d
-rw-r--r-- 1 root root 367 Dec 16 2020 bindresvport.blacklist
drwxr-xr-x 2 root root 4096 Apr 7 2022 binfmt.d
drwxr-xr-x 2 root root 4096 Aug 7 18:54 bluetooth
-rw-r----- 1 root root 33 Aug 7 18:55 brlapi.key
drwxr-xr-x 7 root root 4096 Aug 7 18:54 brltty
-rw-r--r-- 1 root root 29219 Jun 28 2022 brltty.conf
```

Perform a “long display” listing of the files in the current directory

Step 8:

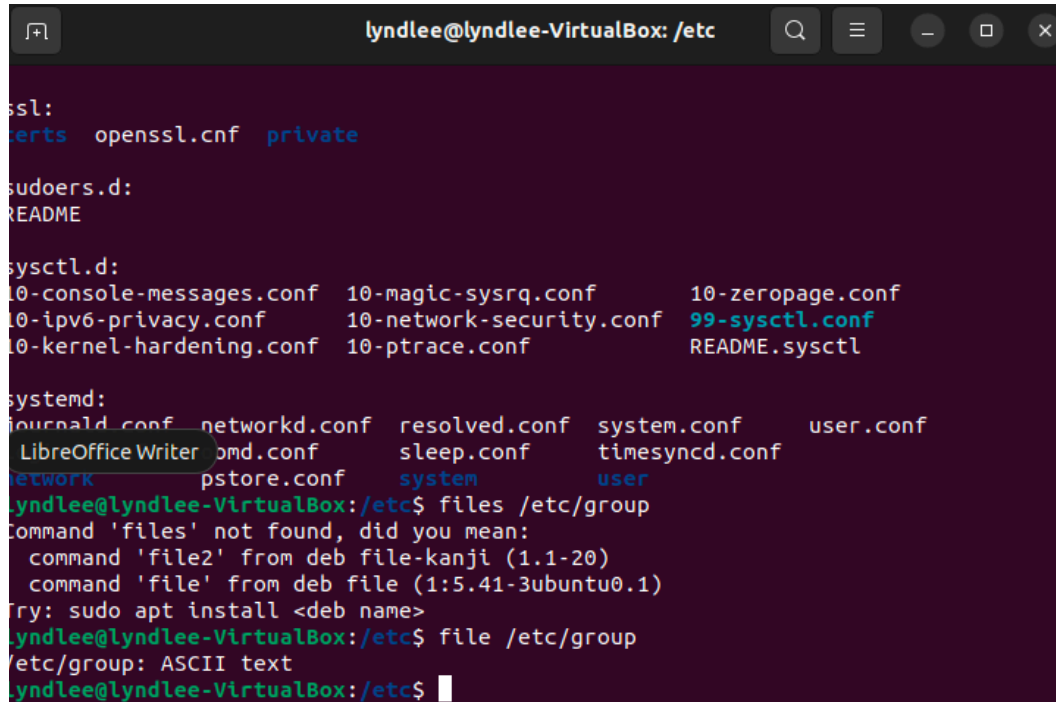


```
lyndlee@lyndlee-VirtualBox: /etc$ ls s*
sensors3.conf  shadow-  subgid-  sudo.conf  sysctl.conf
services       shells  subuid   sudoers
shadow         subgid  subuid-  sudo_logsrvd.conf

sane.d:
abaton.conf      dll.conf      kvs1025.conf  rts8891.conf
agfafocus.conf   dll.d         leo.conf      s9036.conf
airscan.conf     dmc.conf     lexmark.conf  saned.conf
apple.conf       epjitsu.conf ma1509.conf   sceptre.conf
artec.conf       epson2.conf  magicolor.conf sharp.conf
artec_eplus48u.conf epson.conf   matsushita.conf sm3840.conf
avision.conf     epsonds.conf microtek2.conf snapscan.conf
bh.conf          escl.conf    microtek.conf sp15c.conf
canon630u.conf   fujitsu.conf mustek.conf   st400.conf
canon.conf       genesys.conf mustek_pp.conf stv680.conf
canon_dr.conf    gphoto2.conf mustek_usb.conf tamarack.conf
canon_lide70.conf gt68xx.conf  nec.conf      teco1.conf
canon_pp.conf    hp3900.conf  net.conf      teco2.conf
cardscan.conf    hp4200.conf  p5.conf       teco3.conf
coolscan2.conf   hp5400.conf  pie.conf      test.conf
coolscan3.conf   hp.conf     pieusb.conf   u12.conf
coolscan.conf    hpsj5s.conf pixma.conf    umax1220u.conf
dc210.conf       hs20.conf   plustek.conf  umax.conf
```

List all the files in the current directory that begin with the letter s

Step 9:



```
lyndlee@lyndlee-VirtualBox: /etc

ssl:
certs openssl.cnf private

sudoers.d:
README

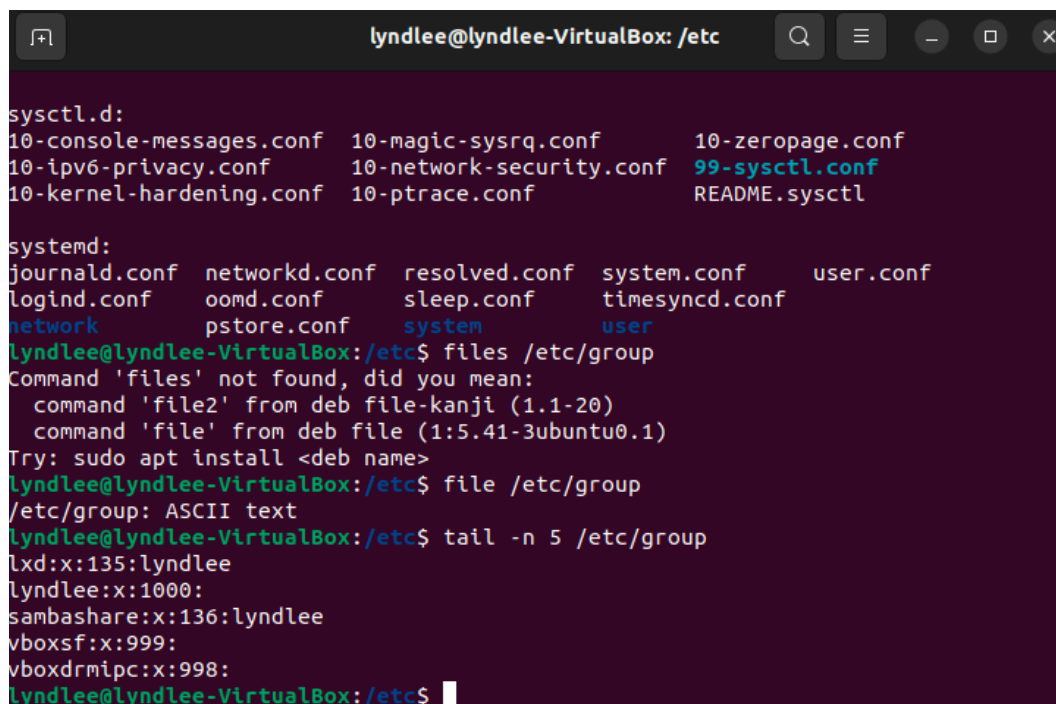
sysctl.d:
10-console-messages.conf 10-magic-sysrq.conf 10-zeropage.conf
10-ipv6-privacy.conf 10-network-security.conf 99-sysctl.conf
10-kernel-hardening.conf 10-pttrace.conf README.sysctl

systemd:
journald.conf networkd.conf resolved.conf system.conf user.conf
LibreOffice Writer oomd.conf sleep.conf timesyncd.conf
networkd.conf pstore.conf system user

lyndlee@lyndlee-VirtualBox:/etc$ files /etc/group
Command 'files' not found, did you mean:
  command 'file2' from deb file-kanji (1.1-20)
  command 'file' from deb file (1:5.41-3ubuntu0.1)
Try: sudo apt install <deb name>
lyndlee@lyndlee-VirtualBox:/etc$ file /etc/group
/etc/group: ASCII text
lyndlee@lyndlee-VirtualBox:/etc$
```

Run the command that will determine the type of contents in the /etc/
group file

Step 10:



```
lyndlee@lyndlee-VirtualBox: /etc

sysctl.d:
10-console-messages.conf 10-magic-sysrq.conf 10-zeropage.conf
10-ipv6-privacy.conf 10-network-security.conf 99-sysctl.conf
10-kernel-hardening.conf 10-pttrace.conf README.sysctl

systemd:
journald.conf networkd.conf resolved.conf system.conf user.conf
logind.conf oomd.conf sleep.conf timesyncd.conf
networkd.conf pstore.conf system user

lyndlee@lyndlee-VirtualBox:/etc$ files /etc/group
Command 'files' not found, did you mean:
  command 'file2' from deb file-kanji (1.1-20)
  command 'file' from deb file (1:5.41-3ubuntu0.1)
Try: sudo apt install <deb name>
lyndlee@lyndlee-VirtualBox:/etc$ file /etc/group
/etc/group: ASCII text
lyndlee@lyndlee-VirtualBox:/etc$ tail -n 5 /etc/group
lxde:x:135:lyndlee
lyndlee:x:1000:
sambashare:x:136:lyndlee
vboxsf:x:999:
vboxdrmpc:x:998:
lyndlee@lyndlee-VirtualBox:/etc$
```

Display only the last five lines of the /etc/group file

Step 11:

```
lyndlee@lyndlee-VirtualBox: ~  
sysctl.d:  
10-console-messages.conf  10-magic-sysrq.conf      10-zeropage.conf  
10-ipv6-privacy.conf       10-network-security.conf  99-sysctl.conf  
10-kernel-hardening.conf  10-pttrace.conf          README.sysctl  
  
systemd:  
journald.conf  networkd.conf  resolved.conf  system.conf  user.conf  
logind.conf    oomd.conf      sleep.conf     timesyncd.conf  
network        pstore.conf    system          user  
lyndlee@lyndlee-VirtualBox:/etc$ files /etc/group  
Command 'files' not found, did you mean:  
  command 'file2' from deb file-kanji (1.1-20)  
  command 'file' from deb file (1:5.41-3ubuntu0.1)  
Try: sudo apt install <deb name>  
lyndlee@lyndlee-VirtualBox:/etc$ file /etc/group  
/etc/group: ASCII text  
lyndlee@lyndlee-VirtualBox:/etc$ tail -n 5 /etc/group  
lxd:x:135:lyndlee  
lyndlee:x:1000:  
sambashare:x:136:lyndlee  
vboxsf:x:999:  
vboxdrmpc:x:998:  
lyndlee@lyndlee-VirtualBox:/etc$ cd  
lyndlee@lyndlee-VirtualBox:~$
```

Execute the command to return to your home directory

Step 12:

```
lyndlee@lyndlee-VirtualBox: ~  
10-console-messages.conf 10-magic-sysrq.conf 10-zeropage.conf  
10-ipv6-privacy.conf 10-network-security.conf 99-sysctl.conf  
10-kernel-hardening.conf 10-pttrace.conf README.sysctl  
  
systemd:  
journal.conf networkd.conf resolved.conf system.conf user.conf  
logind.conf oomd.conf sleep.conf timesyncd.conf  
network pstore.conf system user  
lyndlee@lyndlee-VirtualBox:/etc$ files /etc/group  
Command 'files' not found, did you mean:  
  command 'file2' from deb file-kanji (1.1-20)  
  command 'file' from deb file (1:5.41-3ubuntu0.1)  
Try: sudo apt install <deb name>  
lyndlee@lyndlee-VirtualBox:/etc$ file /etc/group  
/etc/group: ASCII text  
lyndlee@lyndlee-VirtualBox:/etc$ tail -n 5 /etc/group  
lxd:x:135:lyndlee  
lyndlee:x:1000:  
sambashare:x:136:lyndlee  
vboxsf:x:999:  
vboxdrmpc:x:998:  
lyndlee@lyndlee-VirtualBox:/etc$ cd  
lyndlee@lyndlee-VirtualBox:~$ mkdir data  
lyndlee@lyndlee-VirtualBox:~$
```

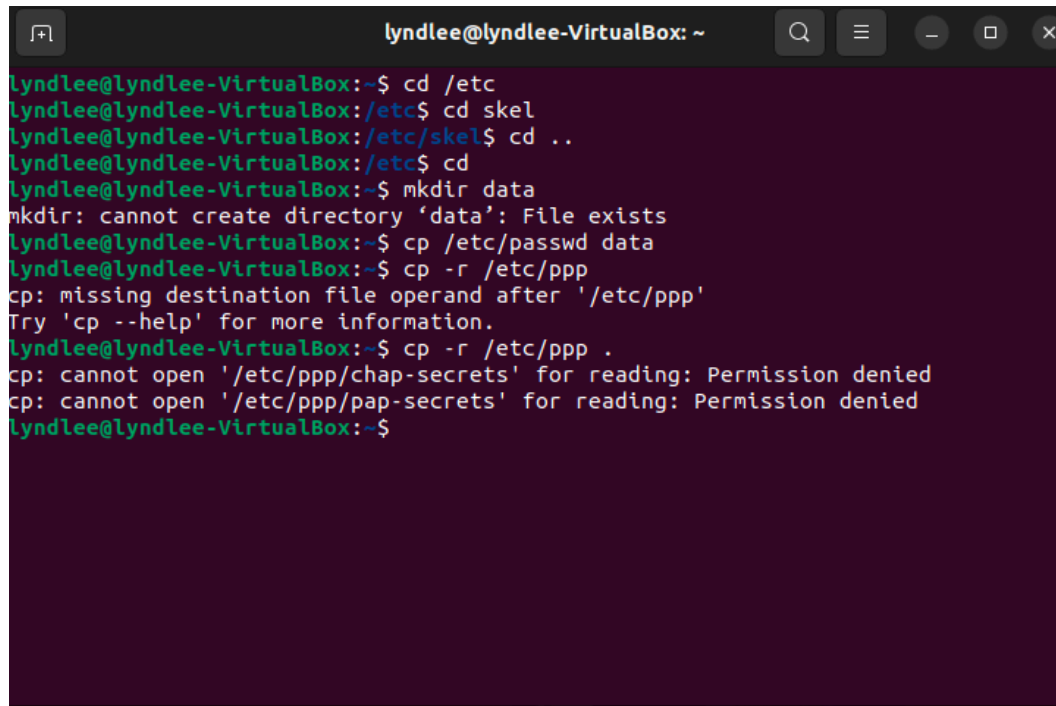
Make a directory named data in the current directory

Step 13:

```
lyndlee@lyndlee-VirtualBox: ~  
10-ipv6-privacy.conf 10-network-security.conf 99-sysctl.conf  
10-kernel-hardening.conf 10-pttrace.conf README.sysctl  
  
systemd:  
journal.conf networkd.conf resolved.conf system.conf user.conf  
logind.conf oomd.conf sleep.conf timesyncd.conf  
network pstore.conf system user  
lyndlee@lyndlee-VirtualBox:/etc$ files /etc/group  
Command 'files' not found, did you mean:  
  command 'file2' from deb file-kanji (1.1-20)  
  command 'file' from deb file (1:5.41-3ubuntu0.1)  
Try: sudo apt install <deb name>  
lyndlee@lyndlee-VirtualBox:/etc$ file /etc/group  
/etc/group: ASCII text  
lyndlee@lyndlee-VirtualBox:/etc$ tail -n 5 /etc/group  
lxd:x:135:lyndlee  
lyndlee:x:1000:  
sambashare:x:136:lyndlee  
vboxsf:x:999:  
vboxdrmpc:x:998:  
lyndlee@lyndlee-VirtualBox:/etc$ cd  
lyndlee@lyndlee-VirtualBox:~$ mkdir data  
lyndlee@lyndlee-VirtualBox:~$ cp /etc/passwd data  
lyndlee@lyndlee-VirtualBox:~$
```

Copy the /etc/passwd file into the data directory

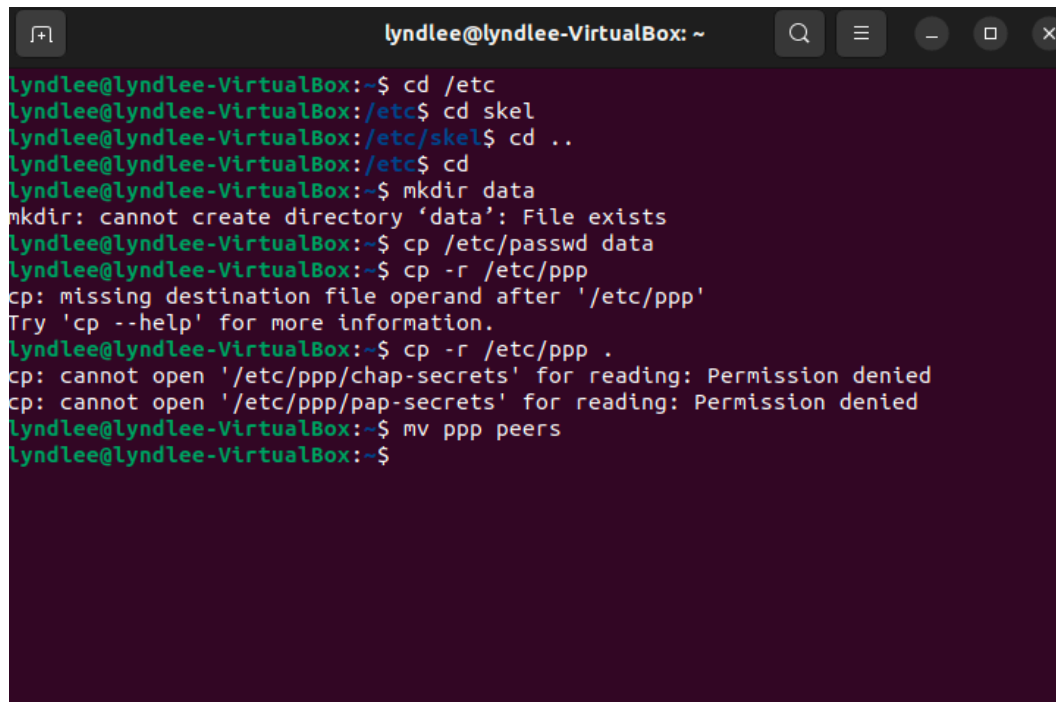
Step 14:

A terminal window titled 'lyndlee@lyndlee-VirtualBox: ~' with standard window controls. The terminal shows the following commands and output:

```
lyndlee@lyndlee-VirtualBox:~$ cd /etc
lyndlee@lyndlee-VirtualBox:/etc$ cd skel
lyndlee@lyndlee-VirtualBox:/etc/skel$ cd ..
lyndlee@lyndlee-VirtualBox:/etc$ cd
lyndlee@lyndlee-VirtualBox:~$ mkdir data
mkdir: cannot create directory 'data': File exists
lyndlee@lyndlee-VirtualBox:~$ cp /etc/passwd data
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp
cp: missing destination file operand after '/etc/ppp'
Try 'cp --help' for more information.
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp .
cp: cannot open '/etc/ppp/chap-secrets' for reading: Permission denied
cp: cannot open '/etc/ppp/pap-secrets' for reading: Permission denied
lyndlee@lyndlee-VirtualBox:~$
```

Copy the /etc/ppp directory into the current directory (and ignore any “permission denied” error messages)

Step 15:

A terminal window titled 'lyndlee@lyndlee-VirtualBox: ~' with standard window controls. The terminal shows the following commands and output:

```
lyndlee@lyndlee-VirtualBox:~$ cd /etc
lyndlee@lyndlee-VirtualBox:/etc$ cd skel
lyndlee@lyndlee-VirtualBox:/etc/skel$ cd ..
lyndlee@lyndlee-VirtualBox:/etc$ cd
lyndlee@lyndlee-VirtualBox:~$ mkdir data
mkdir: cannot create directory 'data': File exists
lyndlee@lyndlee-VirtualBox:~$ cp /etc/passwd data
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp
cp: missing destination file operand after '/etc/ppp'
Try 'cp --help' for more information.
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp .
cp: cannot open '/etc/ppp/chap-secrets' for reading: Permission denied
cp: cannot open '/etc/ppp/pap-secrets' for reading: Permission denied
lyndlee@lyndlee-VirtualBox:~$ mv ppp peers
lyndlee@lyndlee-VirtualBox:~$
```

Rename the ppp directory that is located in the current directory to peers

Step 16:

```
lyndlee@lyndlee-VirtualBox: ~  
lyndlee@lyndlee-VirtualBox:~$ cd /etc  
lyndlee@lyndlee-VirtualBox:/etc$ cd skel  
lyndlee@lyndlee-VirtualBox:/etc/skel$ cd ..  
lyndlee@lyndlee-VirtualBox:/etc$ cd  
lyndlee@lyndlee-VirtualBox:~$ mkdir data  
mkdir: cannot create directory 'data': File exists  
lyndlee@lyndlee-VirtualBox:~$ cp /etc/passwd data  
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp  
cp: missing destination file operand after '/etc/ppp'  
Try 'cp --help' for more information.  
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp .  
cp: cannot open '/etc/ppp/chap-secrets' for reading: Permission denied  
cp: cannot open '/etc/ppp/pap-secrets' for reading: Permission denied  
lyndlee@lyndlee-VirtualBox:~$ mv ppp peers  
lyndlee@lyndlee-VirtualBox:~$ ls  
data      Documents Music Pictures snap      Videos  
Desktop Downloads peers Public Templates  
lyndlee@lyndlee-VirtualBox:~$ ls /etc/ppp  
chap-secrets  ip-pre-up  ip-up.d      ipv6-up      options.pptp  
ip-down       ip-pre-up.d  ipv6-down    ipv6-up.d    pap-secrets  
ip-down.d     ip-up       ipv6-down.d  options      peers  
lyndlee@lyndlee-VirtualBox:~$
```

Execute the command (ls) to verify the change in the name of the directory

Step 17:

```
lyndlee@lyndlee-VirtualBox: ~  
lyndlee@lyndlee-VirtualBox:~$ cd /etc  
lyndlee@lyndlee-VirtualBox:/etc$ cd skel  
lyndlee@lyndlee-VirtualBox:/etc/skel$ cd ..  
lyndlee@lyndlee-VirtualBox:/etc$ cd  
lyndlee@lyndlee-VirtualBox:~$ mkdir data  
mkdir: cannot create directory 'data': File exists  
lyndlee@lyndlee-VirtualBox:~$ cp /etc/passwd data  
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp  
cp: missing destination file operand after '/etc/ppp'  
Try 'cp --help' for more information.  
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp .  
cp: cannot open '/etc/ppp/chap-secrets' for reading: Permission denied  
cp: cannot open '/etc/ppp/pap-secrets' for reading: Permission denied  
lyndlee@lyndlee-VirtualBox:~$ mv ppp peers  
lyndlee@lyndlee-VirtualBox:~$ ls  
data      Documents Music Pictures snap      Videos  
Desktop Downloads peers Public Templates  
lyndlee@lyndlee-VirtualBox:~$ ls /etc/ppp  
chap-secrets  ip-pre-up  ip-up.d      ipv6-up      options.pptp  
ip-down       ip-pre-up.d  ipv6-down    ipv6-up.d    pap-secrets  
ip-down.d     ip-up       ipv6-down.d  options      peers  
lyndlee@lyndlee-VirtualBox:~$ touch data/test  
lyndlee@lyndlee-VirtualBox:~$
```

Create a new empty file named test in the data directory

Step 18:

```
lyndlee@lyndlee-VirtualBox: ~  
lyndlee@lyndlee-VirtualBox:~$ cd /etc  
lyndlee@lyndlee-VirtualBox:/etc$ cd skel  
lyndlee@lyndlee-VirtualBox:/etc/skel$ cd ..  
lyndlee@lyndlee-VirtualBox:/etc$ cd  
lyndlee@lyndlee-VirtualBox:~$ mkdir data  
mkdir: cannot create directory 'data': File exists  
lyndlee@lyndlee-VirtualBox:~$ cp /etc/passwd data  
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp  
cp: missing destination file operand after '/etc/ppp'  
Try 'cp --help' for more information.  
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp .  
cp: cannot open '/etc/ppp/chap-secrets' for reading: Permission denied  
cp: cannot open '/etc/ppp/pap-secrets' for reading: Permission denied  
lyndlee@lyndlee-VirtualBox:~$ mv ppp peers  
lyndlee@lyndlee-VirtualBox:~$ ls  
data      Documents  Music     Pictures  snap      Videos  
Desktop  Downloads peers     Public    Templates  
lyndlee@lyndlee-VirtualBox:~$ ls /etc/ppp  
chap-secrets  ip-pre-up  ip-up.d    ipv6-up    options.pptp  
ip-down       ip-pre-up.d  ipv6-down  ipv6-up.d  pap-secrets  
ip-down.d     ip-up       ipv6-down.d  options    peers  
lyndlee@lyndlee-VirtualBox:~$ touch data/test  
lyndlee@lyndlee-VirtualBox:~$ rm data/passwd  
lyndlee@lyndlee-VirtualBox:~$
```

Delete the data/passwd file

Step 19:

```
lyndlee@lyndlee-VirtualBox: ~  
lyndlee@lyndlee-VirtualBox:/etc$ cd skel  
lyndlee@lyndlee-VirtualBox:/etc/skel$ cd ..  
lyndlee@lyndlee-VirtualBox:/etc$ cd  
lyndlee@lyndlee-VirtualBox:~$ mkdir data  
mkdir: cannot create directory 'data': File exists  
lyndlee@lyndlee-VirtualBox:~$ cp /etc/passwd data  
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp  
cp: missing destination file operand after '/etc/ppp'  
Try 'cp --help' for more information.  
lyndlee@lyndlee-VirtualBox:~$ cp -r /etc/ppp .  
cp: cannot open '/etc/ppp/chap-secrets' for reading: Permission denied  
cp: cannot open '/etc/ppp/pap-secrets' for reading: Permission denied  
lyndlee@lyndlee-VirtualBox:~$ mv ppp peers  
lyndlee@lyndlee-VirtualBox:~$ ls  
data      Documents  Music     Pictures  snap      Videos  
Desktop  Downloads peers     Public    Templates  
lyndlee@lyndlee-VirtualBox:~$ ls /etc/ppp  
chap-secrets  ip-pre-up  ip-up.d    ipv6-up    options.pptp  
ip-down       ip-pre-up.d  ipv6-down  ipv6-up.d  pap-secrets  
ip-down.d     ip-up       ipv6-down.d  options    peers  
lyndlee@lyndlee-VirtualBox:~$ touch data/test  
lyndlee@lyndlee-VirtualBox:~$ rm data/passwd  
lyndlee@lyndlee-VirtualBox:~$ rm -r peers  
lyndlee@lyndlee-VirtualBox:~$
```

Delete the peers directory

Step 20:

```
lyndlee@lyndlee-VirtualBox:~$ ls
data      Documents  Music      Public    Templates
Desktop   Downloads  Pictures    snap      Videos
lyndlee@lyndlee-VirtualBox:~$
```

Re-execute the ls command

