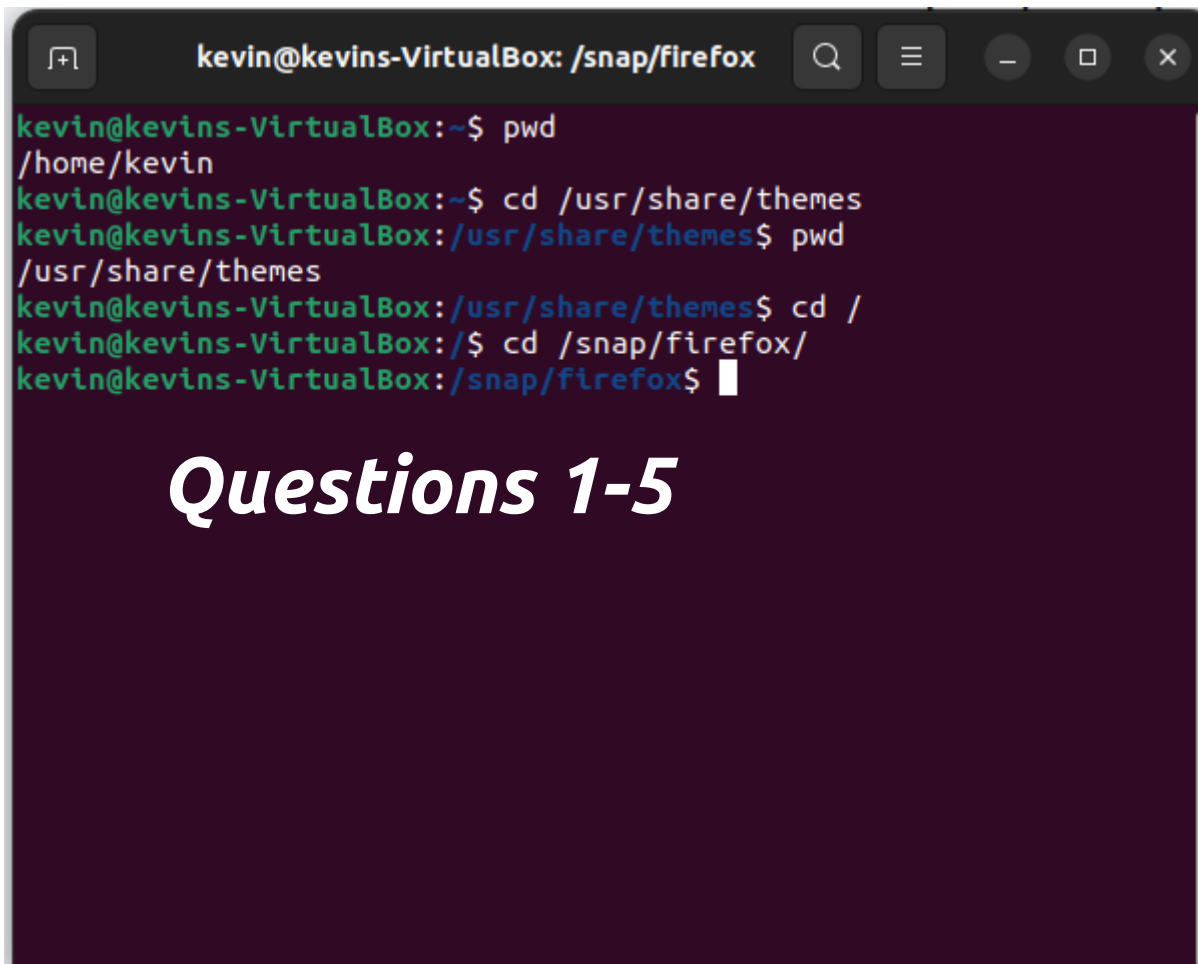


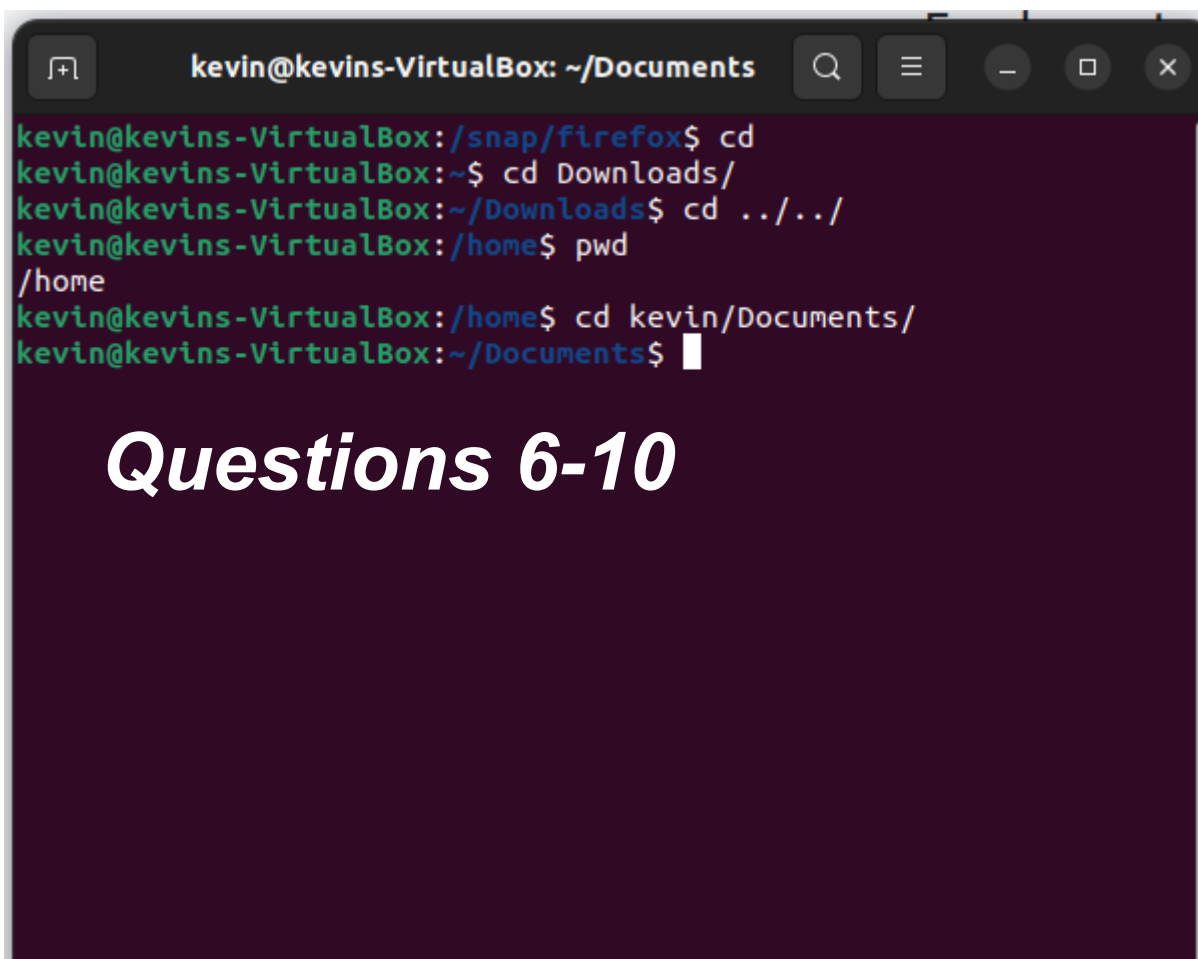
Question 1



A terminal window titled "kevin@kevins-VirtualBox: /snap/firefox" with standard window controls. The terminal shows a series of commands and their outputs: `pwd` returns `/home/kevin`, `cd /usr/share/themes` changes the directory, `pwd` returns `/usr/share/themes`, `cd /` returns to the home directory, and `cd /snap/firefox/` moves to the `/snap/firefox/` directory. The prompt is now `kevin@kevins-VirtualBox:/snap/firefox$`.

```
kevin@kevins-VirtualBox:~$ pwd
/home/kevin
kevin@kevins-VirtualBox:~$ cd /usr/share/themes
kevin@kevins-VirtualBox:/usr/share/themes$ pwd
/usr/share/themes
kevin@kevins-VirtualBox:/usr/share/themes$ cd /
kevin@kevins-VirtualBox:/$ cd /snap/firefox/
kevin@kevins-VirtualBox:/snap/firefox$
```

Questions 1-5



A terminal window titled "kevin@kevins-VirtualBox: ~/Documents" with standard window controls. The terminal shows a series of commands and their outputs: `cd` returns to the previous directory, `cd Downloads/` moves to the `Downloads` directory, `cd ../../` returns to the home directory, `pwd` returns `/home`, `cd kevin/Documents/` moves to the `Documents` directory, and the prompt is now `kevin@kevins-VirtualBox:~/Documents$`.

```
kevin@kevins-VirtualBox:/snap/firefox$ cd
kevin@kevins-VirtualBox:~$ cd Downloads/
kevin@kevins-VirtualBox:~/Downloads$ cd ../../
kevin@kevins-VirtualBox:/home$ pwd
/home
kevin@kevins-VirtualBox:/home$ cd kevin/Documents/
kevin@kevins-VirtualBox:~/Documents$
```

Questions 6-10

Question 2


```

kevin@kevins-VirtualBox:~$ cd /usr/share/
kevin@kevins-VirtualBox:/usr/share$ ls /home/kevin/lab4file
countries.json  globe.avi      sample.xls  website.html
csvfile.csv    helloWorld.c  Tux.png
document.docx  Linux.pdf     Ubuntu.pdf
kevin@kevins-VirtualBox:/usr/share$ cd ~/lab4file
kevin@kevins-VirtualBox:~/lab4file$ ls -lh

```

Questions 1-3

```

total 6.5M
-rw-rw-r-- 1 kevin kevin 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 kevin kevin 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 kevin kevin 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 kevin kevin 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 kevin kevin 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 kevin kevin 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 kevin kevin 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 kevin kevin 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 kevin kevin 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 kevin kevin 135K Feb 22 2022 website.html
kevin@kevins-VirtualBox:~/lab4file$ ls -ls
total 6580
 20 -rw-rw-r-- 1 kevin kevin 20471 Feb 22 2022 countries.json
 280 -rw-rw-r-- 1 kevin kevin 284042 Feb 22 2022 csvfile.csv
 748 -rw-rw-r-- 1 kevin kevin 764176 Feb 22 2022 document.docx
 728 -rw-rw-r-- 1 kevin kevin 742478 Feb 22 2022 globe.avi
   4 -rw-rw-r-- 1 kevin kevin 76 Feb 22 2022 helloWorld.c
2540 -rw-rw-r-- 1 kevin kevin 2600138 Feb 22 2022 Linux.pdf
  12 -rw-rw-r-- 1 kevin kevin 8704 Feb 22 2022 sample.xls
  44 -rw-rw-r-- 1 kevin kevin 42777 Feb 22 2022 Tux.png
2068 -rw-rw-r-- 1 kevin kevin 2114053 Feb 22 2022 Ubuntu.pdf
 136 -rw-rw-r-- 1 kevin kevin 137453 Feb 22 2022 website.html
kevin@kevins-VirtualBox:~/lab4file$ ls -lhS
total 6.5M
-rw-rw-r-- 1 kevin kevin 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 kevin kevin 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 kevin kevin 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 kevin kevin 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 kevin kevin 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 kevin kevin 135K Feb 22 2022 website.html
-rw-rw-r-- 1 kevin kevin 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 kevin kevin 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 kevin kevin 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 kevin kevin 76 Feb 22 2022 helloWorld.c

```

```

kevin@kevins-VirtualBox:~/lab4file$ -lhSgG
-lhSgG: command not found
kevin@kevins-VirtualBox:~/lab4file$ ls -lhSgGi
total 6.5M
1443256 -rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
1443258 -rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
1443261 -rw-rw-r-- 1 747K Feb 22 2022 document.docx
1443262 -rw-rw-r-- 1 726K Feb 22 2022 globe.avi
1443260 -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
1443265 -rw-rw-r-- 1 135K Feb 22 2022 website.html
1443257 -rw-rw-r-- 1 42K Feb 22 2022 Tux.png
1443259 -rw-rw-r-- 1 20K Feb 22 2022 countries.json
1443264 -rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
1443263 -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c

```

```

kevin@kevins-VirtualBox:~/lab4file$ ls -Xr
sample.xls  Linux.pdf      document.docx  globe.avi
Tux.png     countries.json csvfile.csv
Ubuntu.pdf  website.html   helloWorld.c
kevin@kevins-VirtualBox:~/lab4file$

```

Challenge Question 1

```

kevin@kevins-VirtualBox:~$ pwd
/home/kevin
kevin@kevins-VirtualBox:~$ cd /usr/share/icons/default
kevin@kevins-VirtualBox:/usr/share/icons/default$ cd /proc/sys/net/ipv4
kevin@kevins-VirtualBox:/proc/sys/net/ipv4$ cd -
/usr/share/icons/default

```

Questions 1-4

```

kevin@kevins-VirtualBox:/usr/share/icons/default$ ls -a /usr/share/backgrounds
.
..
Blue_flower_by_Elena_Stravoravdi.jpg
canvas_by_roytanck.jpg
Cherry_Tree_in_Lakones_by_elenastravoravdi.jpg
contest
DSC2943_by_kcpru.jpg
Jammy-Jellyfish_WP_4096x2304_Grey.png
jj_dark_by_Hiking93.jpg
jj_light_by_Hiking93.jpg
Mirror_by_Uday_Nakade.jpg
Optical_Fibers_in_Dark_by_Elena_Stravoravdi.jpg
ubuntu2_by_arman1992.jpg
ubuntu_by_arman1992.jpg
ubuntu-default-greyscale-wallpaper.png
warty-final-ubuntu.png

```

Questions 5-7

```

kevin@kevins-VirtualBox:/usr/share/icons/default$ ls ~/cis106
cheatSheets cis106_website labs logo.png weekReports
kevin@kevins-VirtualBox:/usr/share/icons/default$ cd /home
kevin@kevins-VirtualBox:/home$ ls ~/Downloads
code_1.82.2-1694671812_amd64.deb  Inconsolata.zip  Mononoki.zip
deb.package                      Iosevka.zip      mycat.png
FiraCode.zip                    JetBrainsMono.zip practicels
FiraMono.zip                   lab4files.zip    practicels.tar.xz
Games1                          Lekton.zip       SpaceMono.zip
InconsolataGo.zip              Monofur.zip      VScode

```

```

kevin@kevins-VirtualBox:/home$ cd /dev/disk/by-id
kevin@kevins-VirtualBox:/dev/disk/by-id$ ls -al
total 0
drwxr-xr-x 2 root root 160 Oct 26 17:44 .
drwxr-xr-x 8 root root 160 Oct 26 17:43 ..
lrwxrwxrwx 1 root root 9 Oct 26 17:44 ata-VBOX_CD-ROM_VB1-1a2b3c4d -> ../../sr1
lrwxrwxrwx 1 root root 9 Oct 26 17:44 ata-VBOX_CD-ROM_VB2-01700376 -> ../../sr0
lrwxrwxrwx 1 root root 9 Oct 26 17:43 ata-VBOX_HARDDISK_VB4576d0ad-dcba1868 -> ../../sda
lrwxrwxrwx 1 root root 10 Oct 26 17:43 ata-VBOX_HARDDISK_VB4576d0ad-dcba1868-part1 -> ../../sda1
lrwxrwxrwx 1 root root 10 Oct 26 17:43 ata-VBOX_HARDDISK_VB4576d0ad-dcba1868-part2 -> ../../sda2
lrwxrwxrwx 1 root root 10 Oct 26 17:43 ata-VBOX_HARDDISK_VB4576d0ad-dcba1868-part3 -> ../../sda3
kevin@kevins-VirtualBox:/dev/disk/by-id$ ls -al ~
total 6772
drwxr-x--- 31 kevin kevin 4096 Oct 26 19:12 .
drwxr-xr-x 3 root root 4096 Sep 26 20:51 ..
-rw----- 1 kevin kevin 8793 Oct 26 19:33 .bash_history
-rw-r--r-- 1 kevin kevin 220 Sep 26 20:51 .bash_logout
-rw-r--r-- 1 kevin kevin 3771 Sep 26 20:51 .bashrc
drwx----- 21 kevin kevin 4096 Oct 25 17:19 .cache
drwxrwxr-x 7 kevin kevin 4096 Oct 26 17:45 cis106
drwx----- 24 kevin kevin 4096 Oct 26 19:30 .config
-rw-rw-r-- 1 kevin kevin 20471 Feb 22 2022 countries.json
-rw-rw-r-- 1 kevin kevin 284042 Feb 22 2022 csvfile.csv
drwxr-xr-x 3 kevin kevin 4096 Oct 26 17:45 Desktop
drwx----- 2 kevin kevin 4096 Oct 11 18:38 .dillo
-rw-rw-r-- 1 kevin kevin 764176 Feb 22 2022 document.docx
drwxr-xr-x 2 kevin kevin 4096 Oct 26 18:09 Documents
drwxrwxr-x 3 kevin kevin 4096 Sep 27 19:10 .dotnet
drwxr-xr-x 6 kevin kevin 4096 Oct 26 19:08 Downloads
-rw-rw-r-- 2 kevin kevin 0 Oct 26 18:47 flower.mp3
drwx----- 3 kevin kevin 4096 Oct 11 17:24 .fltk
drwxrwxr-x 12 kevin kevin 4096 Oct 11 16:35 .fonts
drwxrwxr-x 3 kevin kevin 4096 Oct 19 18:23 Games
-rw-rw-r-- 1 kevin kevin 64 Sep 27 19:34 .gitconfig
-rw-rw-r-- 1 kevin kevin 742478 Feb 22 2022 globe.avi

```

Questions 8-9

```

kevin@kevins-VirtualBox:/dev/disk/by-id$ ls -t /usr/share/themes
Yaru
Yaru-bark
Yaru-bark-dark
Yaru-blue
Yaru-blue-dark
Yaru-dark
Yaru-dark-hdpi
Yaru-dark-xhdpi
Yaru-hdpi
Yaru-magenta
Yaru-magenta-dark
Yaru-olive
Yaru-olive-dark
Yaru-prussiangreen
Yaru-prussiangreen-dark
Yaru-purple
Yaru-purple-dark
Yaru-red
Yaru-red-dark
Yaru-sage
Yaru-sage-dark
Yaru-viridian
Yaru-viridian-dark
Yaru-xhdpi
Default
Emacs
Raleigh
Adwaita
Adwaita-dark
HighContrast
kevin@kevins-VirtualBox:/dev/disk/by-id$ ls -X /usr/share
accountsservice
aclocal
acpi-support
adduser
aerc
aisleriot
alacarte
alsa
alsa-base
alsa-card-profile
appdata
libdebuginfod-common
libdrm
libexttextcat
libgnomekbd
libgweather
libgweather-4
libinput
liblangtag
liblouis
liblouisutdm1
libmysofa

```

Question 10

Challenge Question 2

```
kevin@kevins-VirtualBox: ~/Downloads
kevin@kevins-VirtualBox:/$ cd home
kevin@kevins-VirtualBox:/home$ cd kevin
kevin@kevins-VirtualBox:~$ cd Downloads/
kevin@kevins-VirtualBox:~/Downloads$ /home/kevin/Downloads/

Part 1
```

```
kevin@kevins-VirtualBox: ~/Documents
kevin@kevins-VirtualBox:~$ cd /usr/share/themes/Adwaita
kevin@kevins-VirtualBox:/usr/share/themes/Adwaita$ cd /home/kevin/Documents
kevin@kevins-VirtualBox:~/Documents$

Part 2
```