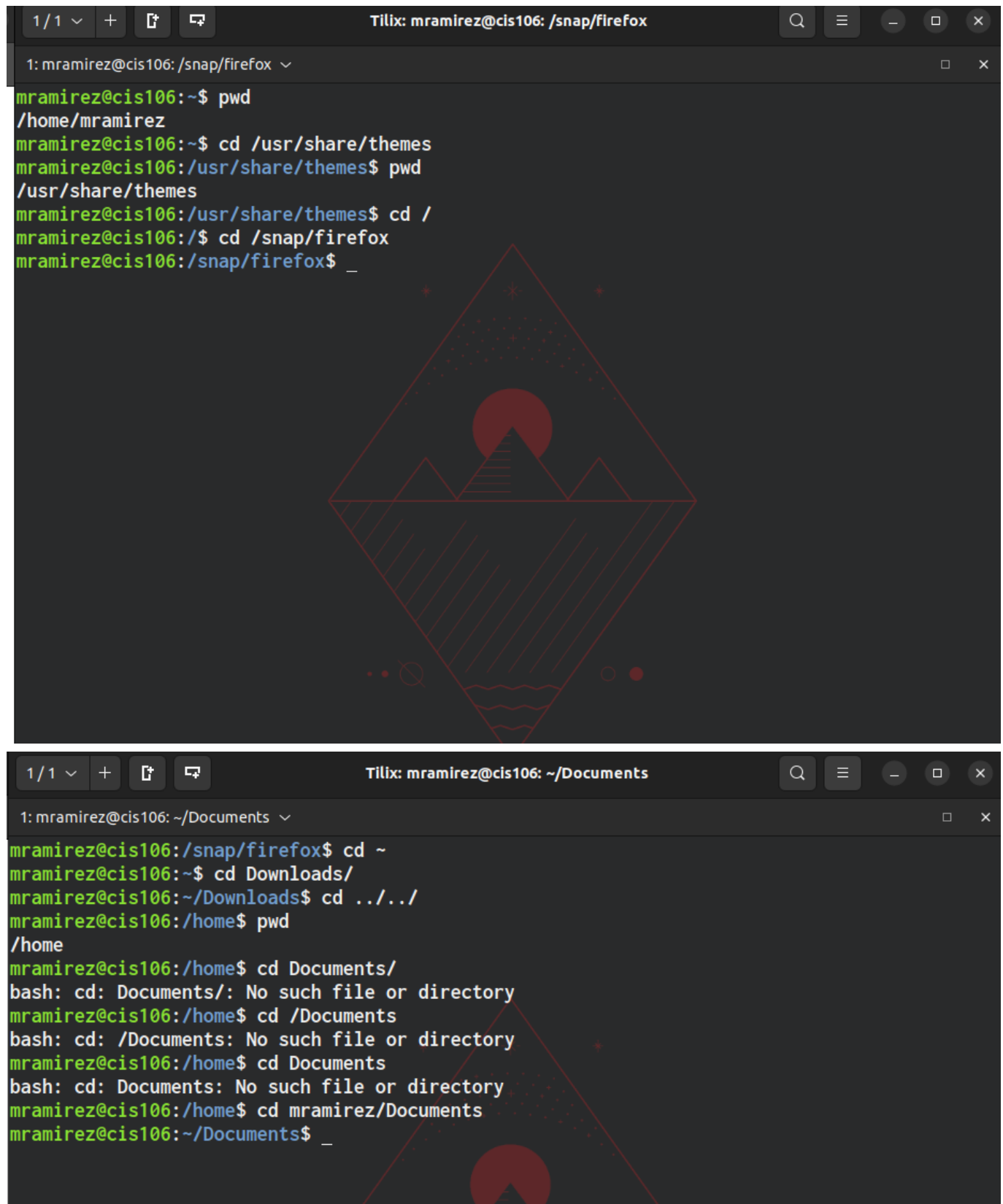


# Lab 4 The Linux FS

## Question 1



The image shows two screenshots of a terminal window titled "Tilix: mramirez@cis106: /snap/firefox". The terminal displays a series of commands and their outputs, demonstrating directory navigation in a Linux file system. A large, stylized red geometric logo is visible in the background of the terminal.

```
1/1 v + [ ] [ ]
Tilix: mramirez@cis106: /snap/firefox
1: mramirez@cis106: /snap/firefox v

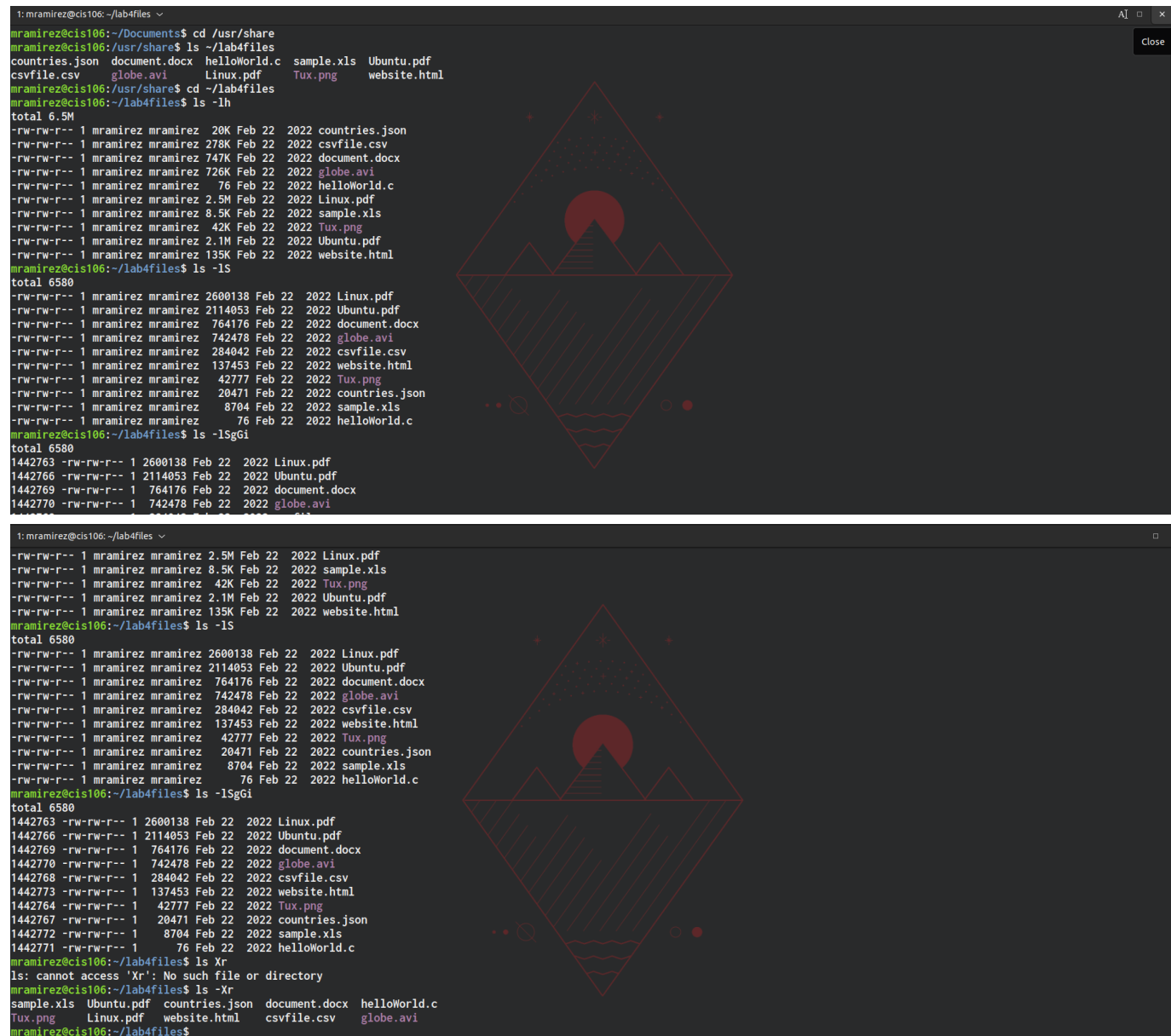
mramirez@cis106:~$ pwd
/home/mramirez
mramirez@cis106:~$ cd /usr/share/themes
mramirez@cis106:/usr/share/themes$ pwd
/usr/share/themes
mramirez@cis106:/usr/share/themes$ cd /
mramirez@cis106:/$ cd /snap/firefox
mramirez@cis106:/snap/firefox$ _
```

The second screenshot shows the terminal window titled "Tilix: mramirez@cis106: ~/Documents". It displays a series of commands and their outputs, demonstrating directory navigation in a Linux file system. A large, stylized red geometric logo is visible in the background of the terminal.

```
1/1 v + [ ] [ ]
Tilix: mramirez@cis106: ~/Documents
1: mramirez@cis106: ~/Documents v

mramirez@cis106:/snap/firefox$ cd ~
mramirez@cis106:~$ cd Downloads/
mramirez@cis106:~/Downloads$ cd ../../
mramirez@cis106:/home$ pwd
/home
mramirez@cis106:/home$ cd Documents/
bash: cd: Documents/: No such file or directory
mramirez@cis106:/home$ cd /Documents
bash: cd: /Documents: No such file or directory
mramirez@cis106:/home$ cd Documents
bash: cd: Documents: No such file or directory
mramirez@cis106:/home$ cd mramirez/Documents
mramirez@cis106:~/Documents$ _
```

## Question 2



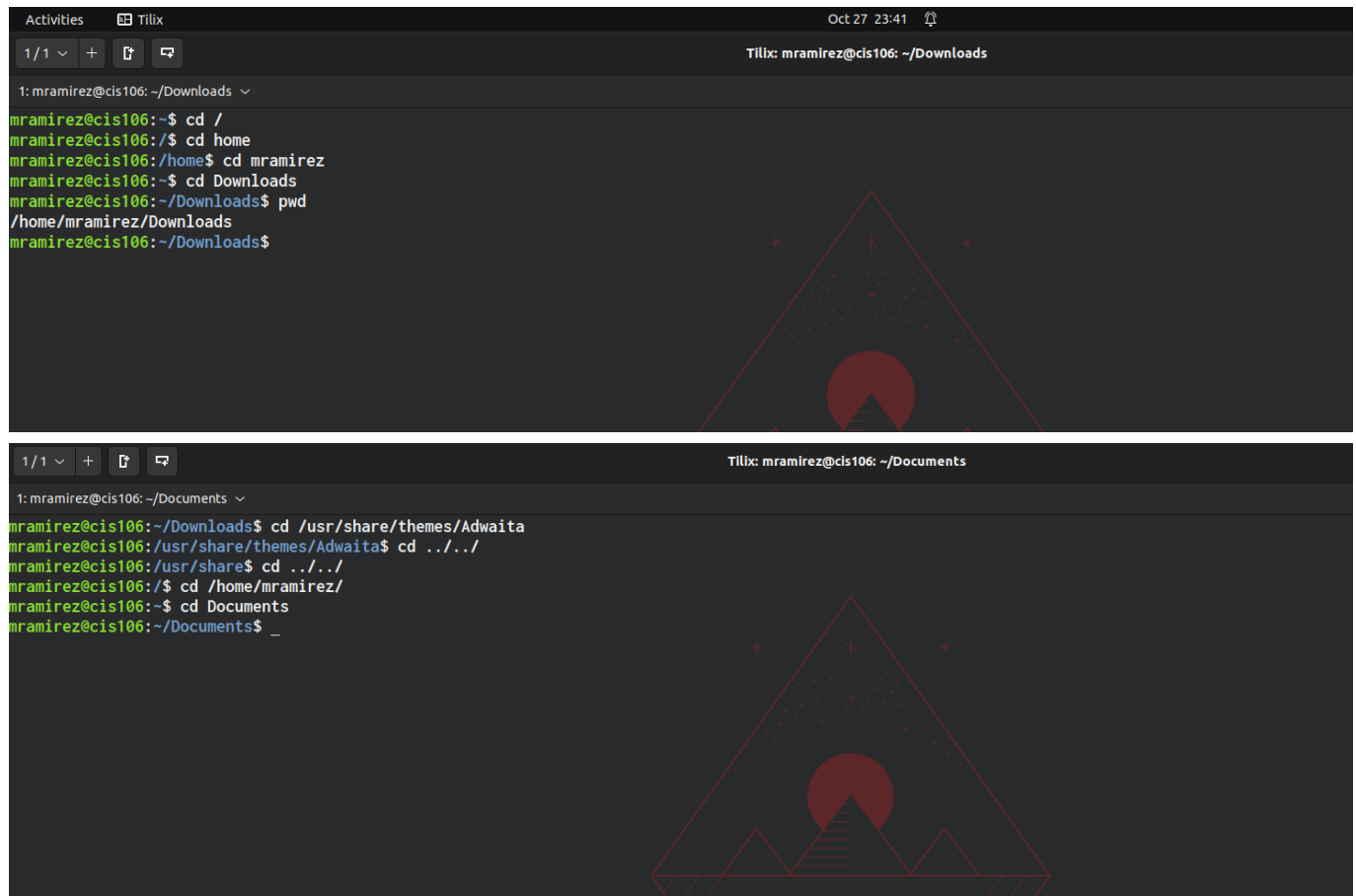
```

1: mramirez@cis106:/dev/disk/by-id
mramirez@cis106:~$ pwd
/home/mramirez
mramirez@cis106:~$ cd /usr/share/icons/default
mramirez@cis106:/usr/share/icons/default$ cd /proc/sys/net/ipv4
mramirez@cis106:/proc/sys/net/ipv4$ cd ../
mramirez@cis106:/proc/sys/net$ ls share/backgrounds
ls: cannot access 'share/backgrounds': No such file or directory
mramirez@cis106:/proc/sys/net$ ls /share/backgrounds
ls: cannot access '/share/backgrounds': No such file or directory
mramirez@cis106:/proc/sys/net$ ls /usr/share/backgrounds
Blue_flower_by_Elena_Stravoravdi.jpg          DSC2943_by_kcpru.jpg          Mirror_by_Uday_Nakade.jpg          ubuntu-default-greyscale-wallpaper.png
canvas_by_roytanck.jpg                        Jammy-Jellyfish_WP_4096x2304_Grey.png  Optical_Fibers_in_Dark_by_Elena_Stravoravdi.jpg  warty-final-ubuntu.png
Cherry_Tree_in_Lakones_by_elenastravoravdi.jpg  jj_dark_by_Hiking93.jpg        ubuntu2_by_arman1992.jpg
contest                                         jj_light_by_Hiking93.jpg        ubuntu_by_arman1992.jpg
mramirez@cis106:/proc/sys/net$ ls /mramirez/cis016
ls: cannot access '/mramirez/cis016': No such file or directory
mramirez@cis106:/proc/sys/net$ ls /cis016
ls: cannot access '/cis016': No such file or directory
mramirez@cis106:/proc/sys/net$ ls /home/mramirez/cis106
cheatSheets  labs  weekReports
mramirez@cis106:/proc/sys/net$ cd /home
mramirez@cis106:/home$ ls /Downloads
ls: cannot access '/Downloads': No such file or directory
mramirez@cis106:/home$ ls Downloads/
ls: cannot access 'Downloads/': No such file or directory
mramirez@cis106:/home$ ls Downloads
ls: cannot access 'Downloads': No such file or directory
mramirez@cis106:/home$ ls /mramirez/Downloads
ls: cannot access '/mramirez/Downloads': No such file or directory
mramirez@cis106:/home$ ls /mramirez/Downloads/
ls: cannot access '/mramirez/Downloads/': No such file or directory
mramirez@cis106:/home$ ls Downloads
ls: cannot access 'Downloads': No such file or directory
mramirez@cis106:/home$ ls /mramirez/Downloads
ls: cannot access '/mramirez/Downloads': No such file or directory

1: mramirez@cis106:/dev/disk/by-id
bash: cd: /Downloads: No such file or directory
mramirez@cis106:/home$ ls /home/mramirez/Downloads
Ace.txt          code_1.83.0-1696350811_amd64.deb          Jay.txt          my          puppy.txt
Characters_of_Final_Fantasy_VII_Remake.png  FFVIIRemake.png          Joe.txt          mygames    'The LS command Cheat Sheet.png'
code_1.82.2-1694671812_amd64.deb          Final_Fantasy_VII_Remake_gameplay_screenshot.png  lab2.pdf         Names      tilix_background.png
mramirez@cis106:/home$ cd /dev/disk/by-id
mramirez@cis106:/dev/disk/by-id$ ls -la
total 0
lrwxr-xr-x 2 root root 140 Oct 27 23:06 .
lrwxr-xr-x 7 root root 140 Oct 27 23:05 ..
lrwxrwxrwx 1 root root 9 Oct 27 23:06 ata-VBOX_CD-ROM_VB2-01700376 -> ../../sr0
lrwxrwxrwx 1 root root 9 Oct 27 23:06 ata-VBOX_HARDDISK_VBa6f15179-d68ff146 -> ../../sda
lrwxrwxrwx 1 root root 10 Oct 27 23:06 ata-VBOX_HARDDISK_VBa6f15179-d68ff146-part1 -> ../../sda1
lrwxrwxrwx 1 root root 10 Oct 27 23:06 ata-VBOX_HARDDISK_VBa6f15179-d68ff146-part2 -> ../../sda2
lrwxrwxrwx 1 root root 10 Oct 27 23:06 ata-VBOX_HARDDISK_VBa6f15179-d68ff146-part3 -> ../../sda3
mramirez@cis106:/dev/disk/by-id$ ls /usr/share/themes -t
/aru          Yaru-blue          Yaru-dark-hdpi          Yaru-magenta          Yaru-olive-dark          Yaru-purple          Yaru-red-dark          Yaru-viridian          Default          Adwaita
/aru-bark     Yaru-blue-dark     Yaru-dark-xhdpi         Yaru-magenta-dark     Yaru-prussiangreen       Yaru-purple-dark     Yaru-sage             Yaru-viridian-dark   Emacs            Adwaita-dark
/aru-bark-dark Yaru-dark          Yaru-hdpi               Yaru-olive            Yaru-prussiangreen-dark  Yaru-red             Yaru-sage-dark        Yaru-xhdpi        Raleigh          HighContrast
mramirez@cis106:/dev/disk/by-id$ ls /usr/share -X
accounts          defaults          gnome-background-properties  javascript          media-player-info          purpose          ubuntu
accountsservice   desktop-directories  gnome-bluetooth              kaddressbook        menu                       pyshared         ubuntu-drivers-common
aclocal           dict              gnome-control-center          kconf_update        mesa-demos              python3          ubuntu-release-upgrader
acpi-support      dictionaries-common  gnome-initial-setup          KDE                 messageviewer            python-apt       ubuntu-wayland
adduser           distro-info         gnome-logs                    kde4                 qt5                       qlogging-categories5  ucf
aisleriot          djvu               gnome-mahjongg                kdeconnect           keyrings                 metainfo         qt5
akonadi            dns                 gnome-panel                   kf5                  kmail2                    misc              qt5keychain
alacarte           dnsmasq-base       gnome-remote-desktop          keyrings              kf5                        mime              qtcreator
alsa               doc                 gnome-session                 knotifications5      kpackage                  ModemManager     readline
alsa-base          doc-base           gnome-settings-daemon         kpackage              krunner                   kservice5         rig
alsa-card-profile  dpkg               gnome-shell                   kservice5             krunner                   kservice5         rsync
appdata            emacs              gnome-system-monitor          kservice5             kservice5                 kservice5         rsync
app-info           emacsen-common     gnome-todo                    kservice5             kservice5                 kservice5         rsyslog
applications        enchant-2           gnome-tweaks                  kservice5             kservice5                 kservice5         rubygems-integration
appport            eog                gnome-tweaks                  kservice5             kservice5                 kservice5         vim

```

## Question 5



The image shows two screenshots of a Linux terminal window. The top screenshot shows the user navigating from the Downloads directory to the root directory and back. The bottom screenshot shows the user navigating from the Downloads directory to the Documents directory via the /usr/share/themes/Adwaita directory. Both screenshots feature a dark background with a red geometric pattern, including a large triangle and a circle, which is part of the Adwaita theme.

```
Activities  Tilix  Oct 27 23:41  [bell icon]

1/1  +  [share icon]  [refresh icon]  Tilix: mramirez@cis106: ~/Downloads

1: mramirez@cis106: ~/Downloads  v
mramirez@cis106:~$ cd /
mramirez@cis106:/$ cd home
mramirez@cis106:/home$ cd mramirez
mramirez@cis106:~$ cd Downloads
mramirez@cis106:~/Downloads$ pwd
/home/mramirez/Downloads
mramirez@cis106:~/Downloads$

1/1  +  [share icon]  [refresh icon]  Tilix: mramirez@cis106: ~/Documents

1: mramirez@cis106: ~/Documents  v
mramirez@cis106:~/Downloads$ cd /usr/share/themes/Adwaita
mramirez@cis106:/usr/share/themes/Adwaita$ cd ../../
mramirez@cis106:/usr/share$ cd ../../
mramirez@cis106:/$ cd /home/mramirez/
mramirez@cis106:~$ cd Documents
mramirez@cis106:~/Documents$ _
```