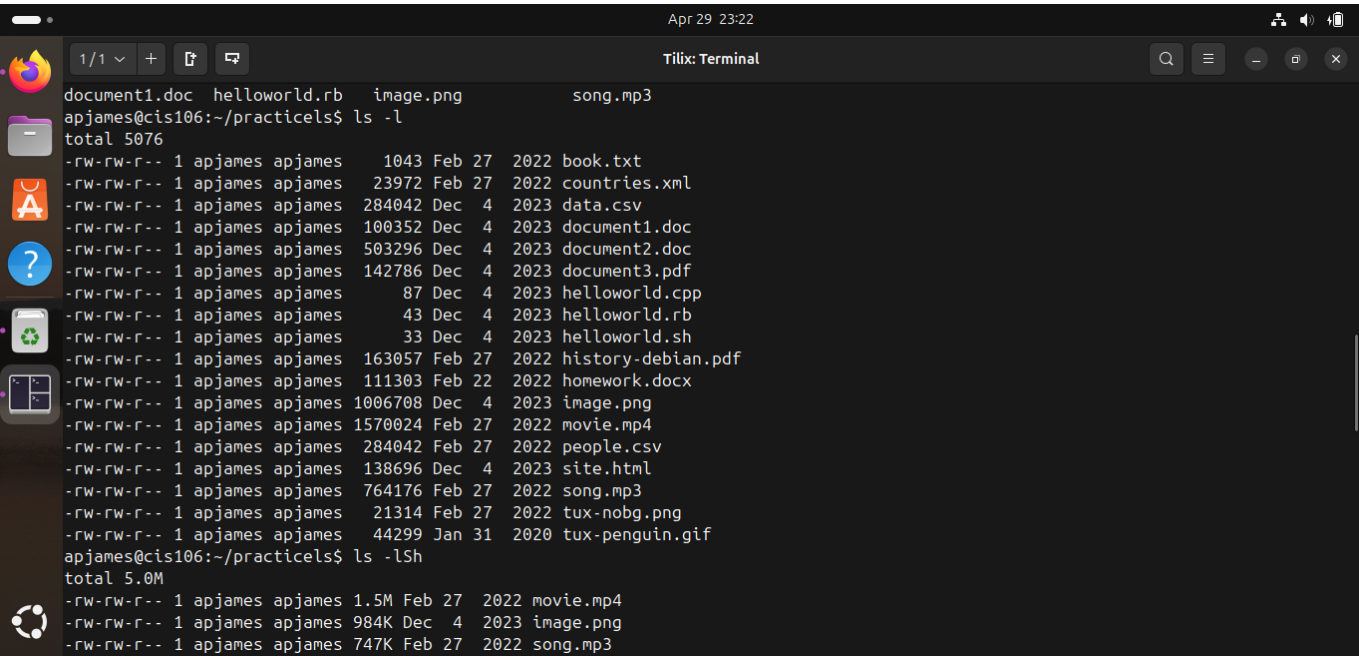
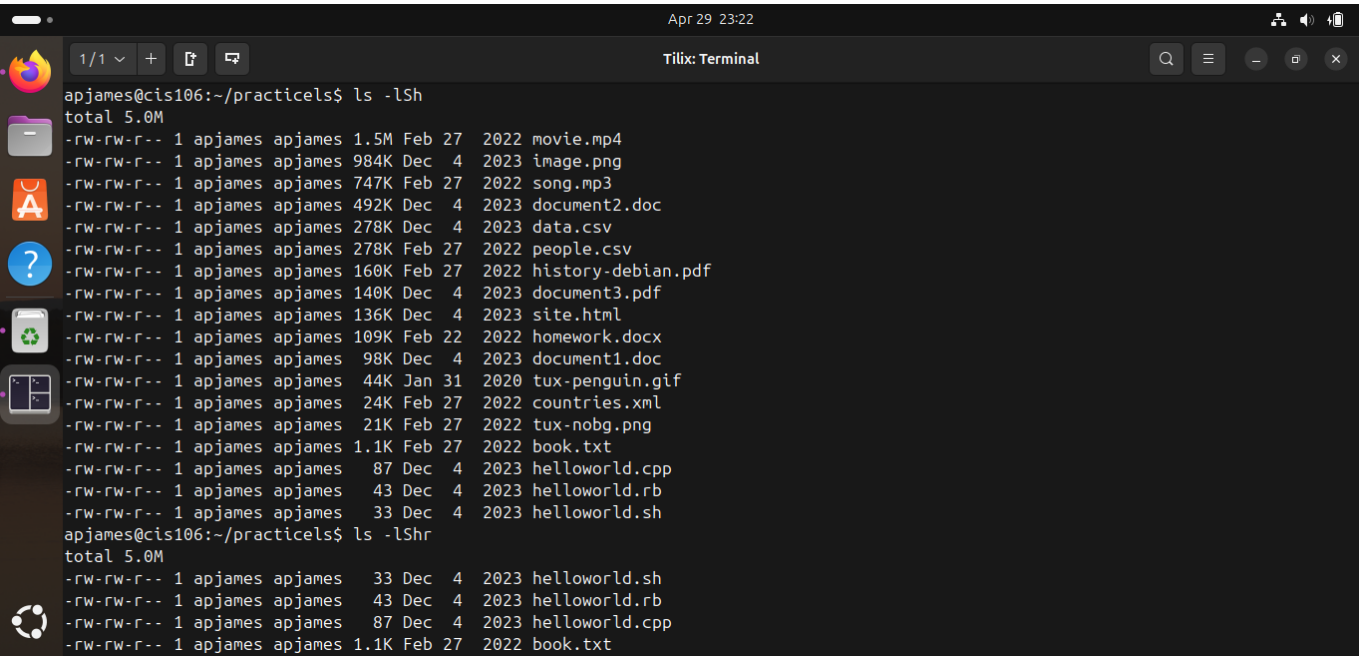


Extra Credit 3: The Linux FS

Linux 1



Linux 2



Linux 3

```

Apr 29 23:23
Tilix: Terminal
1/1 +
-rw-rw-r-- 1 apjames apjames 43 Dec 4 2023 helloworld.rb
-rw-rw-r-- 1 apjames apjames 33 Dec 4 2023 helloworld.sh
apjames@cis106:~/practicels$ ls -lshr
total 5.0M
-rw-rw-r-- 1 apjames apjames 33 Dec 4 2023 helloworld.sh
-rw-rw-r-- 1 apjames apjames 43 Dec 4 2023 helloworld.rb
-rw-rw-r-- 1 apjames apjames 87 Dec 4 2023 helloworld.cpp
-rw-rw-r-- 1 apjames apjames 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 apjames apjames 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 apjames apjames 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 apjames apjames 44K Jan 31 2020 tux-penguin.gif
-rw-rw-r-- 1 apjames apjames 98K Dec 4 2023 document1.doc
-rw-rw-r-- 1 apjames apjames 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 apjames apjames 136K Dec 4 2023 site.html
-rw-rw-r-- 1 apjames apjames 140K Dec 4 2023 document3.pdf
-rw-rw-r-- 1 apjames apjames 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 apjames apjames 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 apjames apjames 278K Dec 4 2023 data.csv
-rw-rw-r-- 1 apjames apjames 492K Dec 4 2023 document2.doc
-rw-rw-r-- 1 apjames apjames 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 apjames apjames 984K Dec 4 2023 image.png
-rw-rw-r-- 1 apjames apjames 1.5M Feb 27 2022 movie.mp4
apjames@cis106:~/practicels$ ls -lgChX --full-time
total 5.0M
-rw-rw-r-- 1 87 2023-12-04 20:27:00.000000000 -0500 helloworld.cpp
-rw-rw-r-- 1 278K 2023-12-04 20:22:38.000000000 -0500 data.csv

```

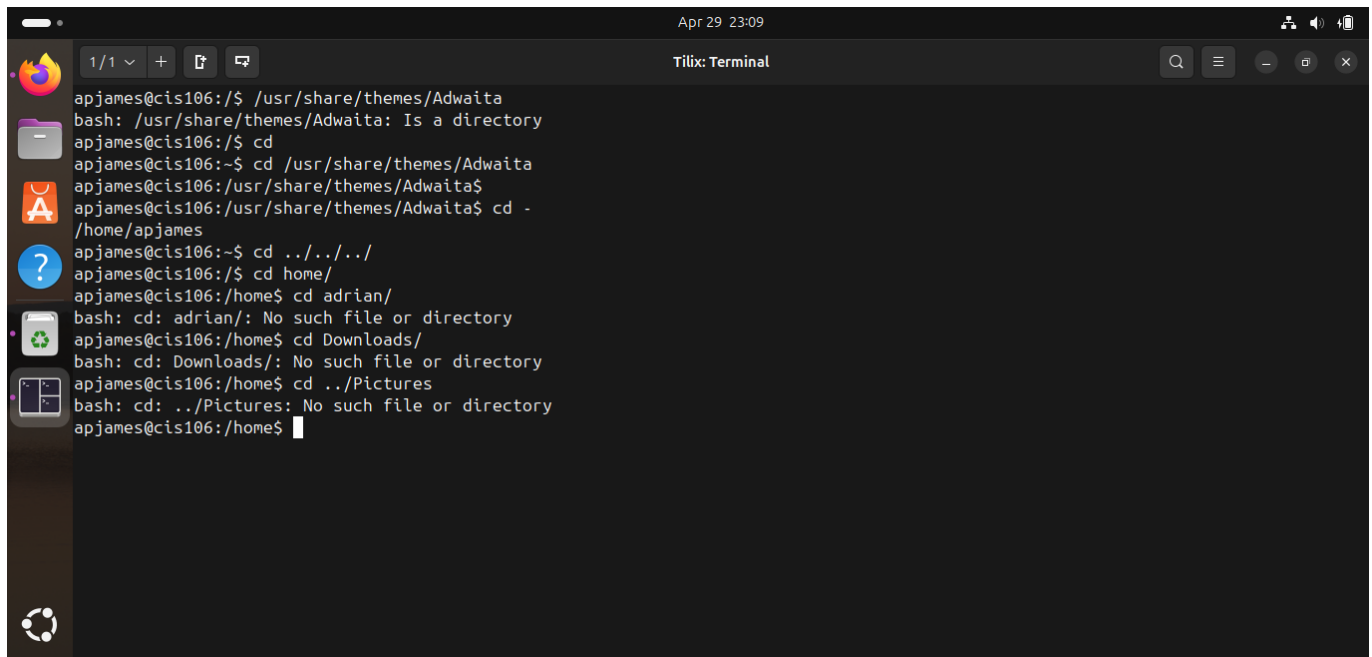
Linux 4

```

Apr 29 23:23
Tilix: Terminal
1/1 +
-rw-rw-r-- 1 apjames apjames 278K Dec 4 2023 data.csv
-rw-rw-r-- 1 apjames apjames 492K Dec 4 2023 document2.doc
-rw-rw-r-- 1 apjames apjames 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 apjames apjames 984K Dec 4 2023 image.png
-rw-rw-r-- 1 apjames apjames 1.5M Feb 27 2022 movie.mp4
apjames@cis106:~/practicels$ ls -lgChX --full-time
total 5.0M
-rw-rw-r-- 1 87 2023-12-04 20:27:00.000000000 -0500 helloworld.cpp
-rw-rw-r-- 1 278K 2023-12-04 20:22:38.000000000 -0500 data.csv
-rw-rw-r-- 1 278K 2022-02-27 13:45:15.000000000 -0500 people.csv
-rw-rw-r-- 1 98K 2023-12-04 20:19:37.000000000 -0500 document1.doc
-rw-rw-r-- 1 492K 2023-12-04 20:19:50.000000000 -0500 document2.doc
-rw-rw-r-- 1 109K 2022-02-22 14:14:35.000000000 -0500 homework.docx
-rw-rw-r-- 1 44K 2020-01-31 04:28:58.000000000 -0500 tux-penguin.gif
-rw-rw-r-- 1 136K 2023-12-04 20:23:56.000000000 -0500 site.html
-rw-rw-r-- 1 747K 2022-02-27 13:44:40.000000000 -0500 song.mp3
-rw-rw-r-- 1 1.5M 2022-02-27 13:42:49.000000000 -0500 movie.mp4
-rw-rw-r-- 1 140K 2023-12-04 20:21:14.000000000 -0500 document3.pdf
-rw-rw-r-- 1 160K 2022-02-27 13:41:40.000000000 -0500 history-debian.pdf
-rw-rw-r-- 1 984K 2023-12-04 20:22:05.000000000 -0500 image.png
-rw-rw-r-- 1 21K 2022-02-27 13:40:48.000000000 -0500 tux-nobg.png
-rw-rw-r-- 1 43 2023-12-04 20:27:26.000000000 -0500 helloworld.rb
-rw-rw-r-- 1 33 2023-12-04 20:26:43.000000000 -0500 helloworld.sh
-rw-rw-r-- 1 1.1K 2022-02-27 13:39:05.000000000 -0500 book.txt
-rw-rw-r-- 1 24K 2022-02-27 13:46:18.000000000 -0500 countries.xml
apjames@cis106:~/practicels$

```

Practice 1



The image shows a terminal window titled "Tilix: Terminal" with a dark background. The window has a title bar with the date and time "Apr 29 23:09" and standard window controls. On the left side, there is a vertical sidebar with several icons: a Firefox logo, a file manager icon, an application icon, a question mark icon, a trash icon, and a window manager icon. The terminal text shows a user named "apjames" at a machine named "cis106" navigating through the file system. The commands and their outputs are as follows:

```
apjames@cis106:/$ /usr/share/themes/Adwaita
bash: /usr/share/themes/Adwaita: Is a directory
apjames@cis106:/$ cd
apjames@cis106:~$ cd /usr/share/themes/Adwaita
apjames@cis106:/usr/share/themes/Adwaita$
apjames@cis106:/usr/share/themes/Adwaita$ cd -
/home/apjames
apjames@cis106:~$ cd ../../../../
apjames@cis106:/$ cd home/
apjames@cis106:/home$ cd adrian/
bash: cd: adrian/: No such file or directory
apjames@cis106:/home$ cd Downloads/
bash: cd: Downloads/: No such file or directory
apjames@cis106:/home$ cd ../Pictures
bash: cd: ../Pictures: No such file or directory
apjames@cis106:/home$
```