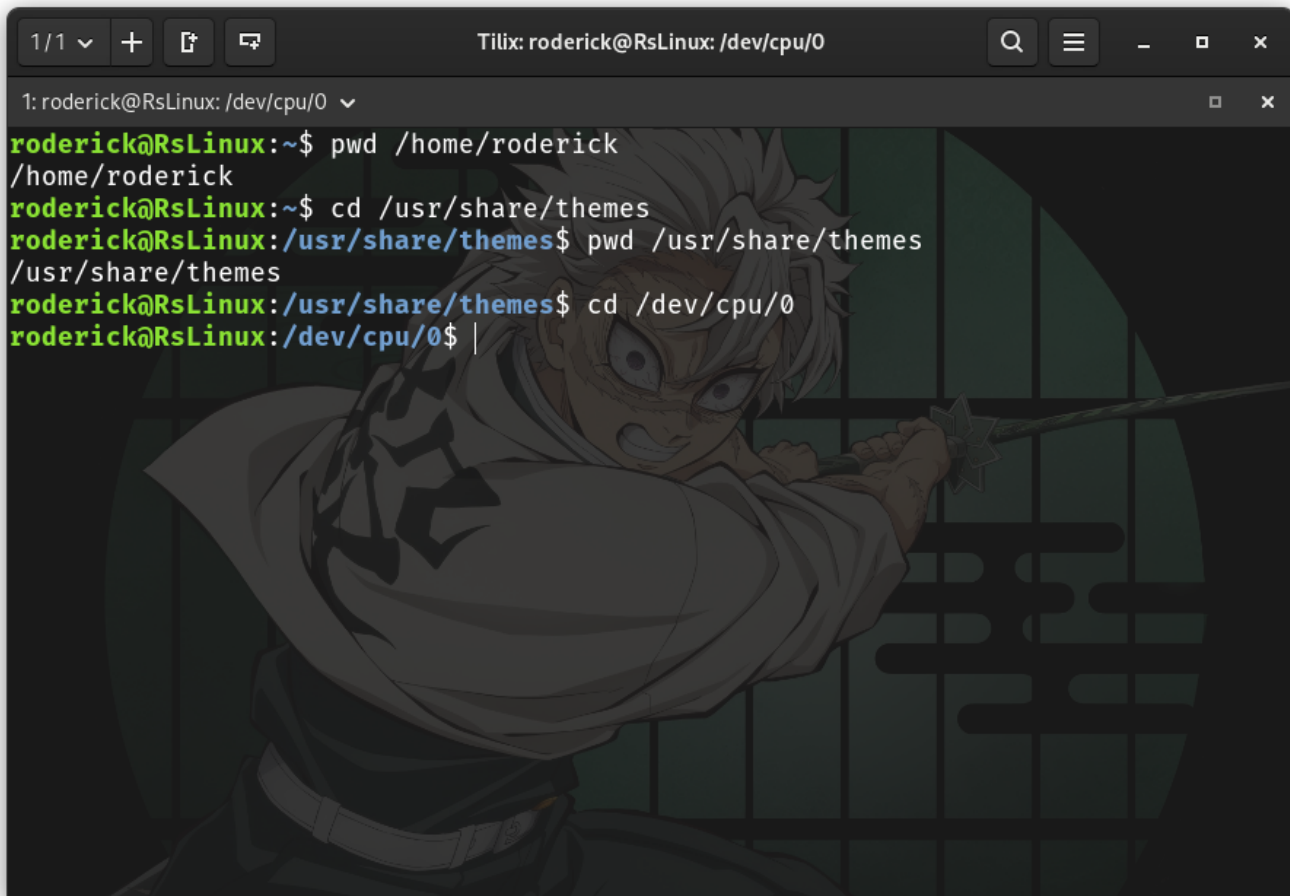


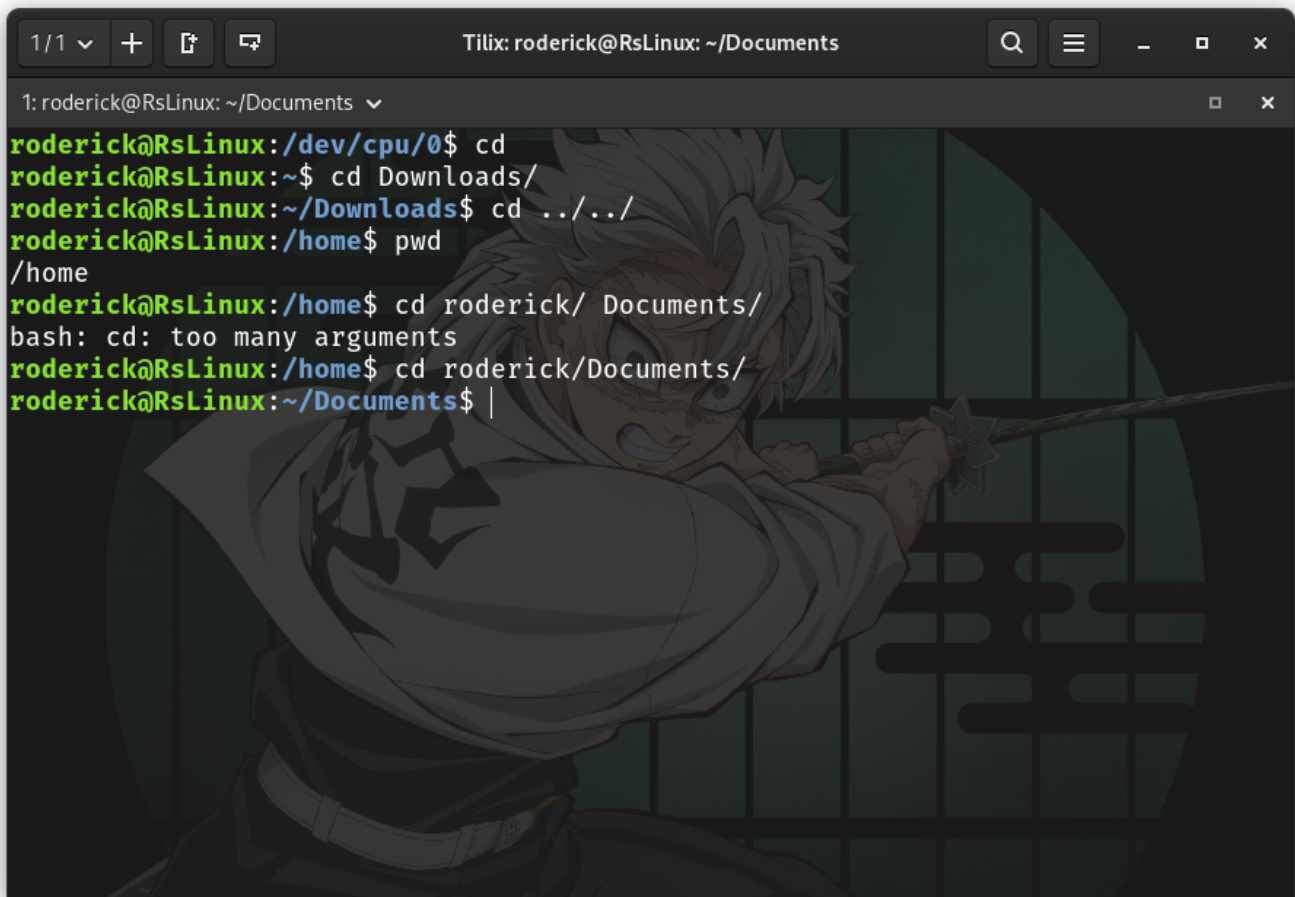
Completed Lab 5

Question 1



```
1/1  +  [Share]  [Copy]  Tilix: roderick@RsLinux: /dev/cpu/0  [Search] [Menu] [Window] [Close]
1: roderick@RsLinux: /dev/cpu/0  [Close]
roderick@RsLinux:~$ pwd /home/roderick
/home/roderick
roderick@RsLinux:~$ cd /usr/share/themes
roderick@RsLinux:/usr/share/themes$ pwd /usr/share/themes
/usr/share/themes
roderick@RsLinux:/usr/share/themes$ cd /dev/cpu/0
roderick@RsLinux:/dev/cpu/0$ |
```

The terminal window displays a series of directory navigation commands and their outputs. The background features a dark-themed anime illustration of a character with spiky hair, wearing a grey hoodie and a black belt, holding a sword. The character is positioned in front of a dark, grid-like structure, possibly a window or a door.

A terminal window titled 'Tilix: roderick@RsLinux: ~/Documents' with a background image of Naruto Uzumaki. The terminal shows a series of commands and their outputs. The user starts in /dev/cpu/0, moves to ~/Downloads, then to /home, and finally to ~/Documents. The last command is cut off by the prompt.

```
1/1 v + [ ] [ ]
Tilix: roderick@RsLinux: ~/Documents
1: roderick@RsLinux: ~/Documents v
roderick@RsLinux:/dev/cpu/0$ cd
roderick@RsLinux:~$ cd Downloads/
roderick@RsLinux:~/Downloads$ cd ../../
roderick@RsLinux:/home$ pwd
/home
roderick@RsLinux:/home$ cd roderick/ Documents/
bash: cd: too many arguments
roderick@RsLinux:/home$ cd roderick/Documents/
roderick@RsLinux:~/Documents$ |
```

Question 2

```

1/1  +  [ ]  [ ]  Tilix: roderick@RsLinux: ~/lab5files  [ ]  [ ]  [ ]  [ ]
1: roderick@RsLinux: ~/lab5files  [ ]  [ ]  [ ]  [ ]
roderick@RsLinux:~$ cd /usr/share
roderick@RsLinux:/usr/share$ ls -A ~/lab5files
countries.json  document.docx  helloWorld.c  sample.xls  Ubuntu.pdf
csvfile.csv    globe.avi      Linux.pdf     Tux.png     website.html
roderick@RsLinux:/usr/share$ cd ~/lab5files/
roderick@RsLinux:~/lab5files$ ls -lh
total 6.5M
-rw-rw-r-- 1 roderick roderick 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 roderick roderick 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 roderick roderick 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 roderick roderick 726K Feb 22 2022 globe.avi

2: roderick@RsLinux: ~  [ ]  [ ]  [ ]  [ ]
-w, --width=COLS      set output width to COLS. 0 means no limit
-x                    list entries by lines instead of by columns
-X                    sort alphabetically by entry extension
-Z, --context          print any security context of each file
--zero                end each output line with NUL, not newline
-1                    list one file per line
--help                display this help and exit
--version             output version information and exit

The SIZE argument is an integer and optional unit (example: 10K is 10*1024).
Units are K,M,G,T,P,E,Z,Y,R,Q (powers of 1024) or KB,MB,... (powers of 1000).

```

```

1/1  +  [ ]  [ ]  [ ]  Tilix: roderick@RsLinux: ~  [ ]  [ ]  [ ]  [ ]
1: roderick@RsLinux: ~/lab5files  [ ]  [ ]  [ ]  [ ]
-rw-rw-r-- 1 roderick roderick 135K Feb 22 2022 website.html
roderick@RsLinux:~/lab5files$ ls -lhs
total 6.5M
-rw-rw-r-- 1 roderick roderick 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 roderick roderick 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 roderick roderick 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 roderick roderick 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 roderick roderick 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 roderick roderick 135K Feb 22 2022 website.html
-rw-rw-r-- 1 roderick roderick 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 roderick roderick 20K Feb 22 2022 countries.json

2: roderick@RsLinux: ~  [ ]  [ ]  [ ]  [ ]
literal, locale, shell, shell-always,
shell-escape, shell-escape-always, c, escape
(overrides QUOTING_STYLE environment variable)

-r, --reverse          reverse order while sorting
-R, --recursive        list subdirectories recursively
-s, --size             print the allocated size of each file, in blocks
-S                    sort by file size, largest first
--sort=WORD            change default 'name' sort to WORD:
                        none (-U), size (-S), time (-t),
                        version (-v), extension (-X), name, width

```

```

1/1  +  [ ]  [ ]  Tilix: roderick@RsLinux: ~
1: roderick@RsLinux: ~/lab5files
-rw-rw-r-- 1 roderick roderick 76 Feb 22 2022 helloWorld.c
roderick@RsLinux:~/lab5files$ ls -lshGg
total 6.5M
 20K -rw-rw-r-- 1 20K Feb 22 2022 countries.json
280K -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
748K -rw-rw-r-- 1 747K Feb 22 2022 document.docx
728K -rw-rw-r-- 1 726K Feb 22 2022 globe.avi
4.0K -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c
2.5M -rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
 12K -rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
 44K -rw-rw-r-- 1 42K Feb 22 2022 Tux.png

2: roderick@RsLinux: ~
literal, locale, shell, shell-always,
shell-escape, shell-escape-always, c, escape
(overrides QUOTING_STYLE environment variable)

-r, --reverse          reverse order while sorting
-R, --recursive        list subdirectories recursively
-s, --size              print the allocated size of each file, in blocks
-S                    sort by file size, largest first
--sort=WORD            change default 'name' sort to WORD:
                        none (-U), size (-S), time (-t),
                        version (-v), extension (-X), name, width

```

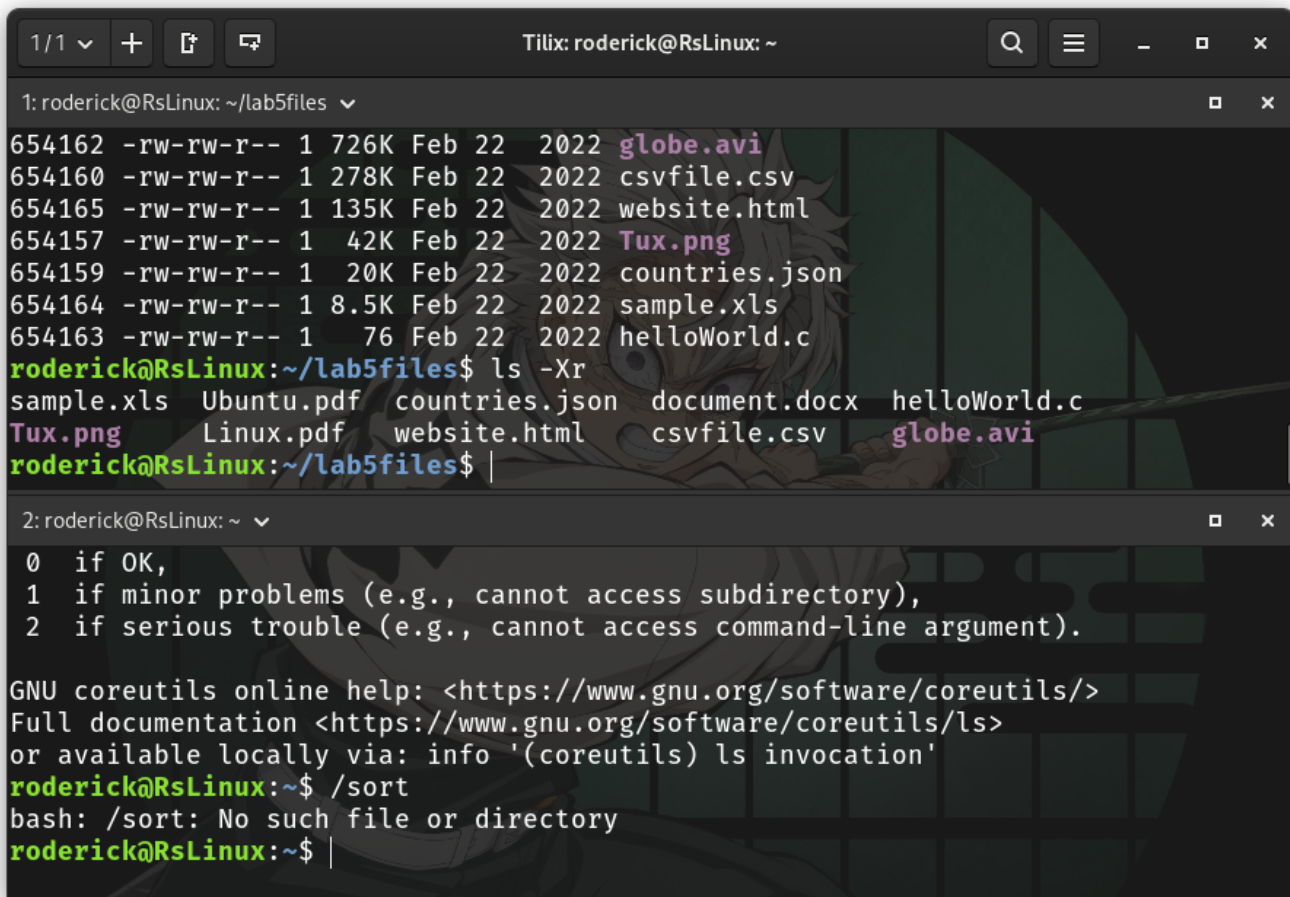
```

1/1  +  [ ]  [ ]  Tilix: roderick@RsLinux: ~
1: roderick@RsLinux: ~/lab5files
136K -rw-rw-r-- 1 135K Feb 22 2022 website.html
roderick@RsLinux:~/lab5files$ ls -lhSGgi
total 6.5M
654156 -rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
654158 -rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
654161 -rw-rw-r-- 1 747K Feb 22 2022 document.docx
654162 -rw-rw-r-- 1 726K Feb 22 2022 globe.avi
654160 -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
654165 -rw-rw-r-- 1 135K Feb 22 2022 website.html
654157 -rw-rw-r-- 1 42K Feb 22 2022 Tux.png
654159 -rw-rw-r-- 1 20K Feb 22 2022 countries.json

2: roderick@RsLinux: ~
0 if OK,
1 if minor problems (e.g., cannot access subdirectory),
2 if serious trouble (e.g., cannot access command-line argument).

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation <https://www.gnu.org/software/coreutils/ls>
or available locally via: info '(coreutils) ls invocation'
roderick@RsLinux:~$ /sort
bash: /sort: No such file or directory
roderick@RsLinux:~$

```

The screenshot shows a terminal window titled "Tilix: roderick@RsLinux: ~". It contains two panes. The top pane shows the output of the command `ls -l` in the directory `~/lab5files`, listing files with their permissions, sizes, dates, and names. The bottom pane shows the output of the command `ls -Xr` in the same directory, listing files in a different order. Below this, it shows the output of the command `ls -Xr` in the home directory, listing files in a different order. Finally, it shows the output of the command `/sort`, which results in an error message: "bash: /sort: No such file or directory".

```
1: roderick@RsLinux: ~/lab5files
654162 -rw-rw-r-- 1 726K Feb 22 2022 globe.avi
654160 -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
654165 -rw-rw-r-- 1 135K Feb 22 2022 website.html
654157 -rw-rw-r-- 1 42K Feb 22 2022 Tux.png
654159 -rw-rw-r-- 1 20K Feb 22 2022 countries.json
654164 -rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
654163 -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c
roderick@RsLinux:~/lab5files$ ls -Xr
sample.xls  Ubuntu.pdf  countries.json  document.docx  helloWorld.c
Tux.png     Linux.pdf   website.html   csvfile.csv    globe.avi
roderick@RsLinux:~/lab5files$

2: roderick@RsLinux: ~
0  if OK,
1  if minor problems (e.g., cannot access subdirectory),
2  if serious trouble (e.g., cannot access command-line argument).

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation <https://www.gnu.org/software/coreutils/ls>
or available locally via: info '(coreutils) ls invocation'
roderick@RsLinux:~$ /sort
bash: /sort: No such file or directory
roderick@RsLinux:~$
```

Question 3

```
1/1 v + [ ] [ ] Tilix: roderick@RsLinux: ~/marstenHouse
1: roderick@RsLinux: ~/marstenHouse v
roderick@RsLinux:~$ cd marstenHouse
roderick@RsLinux:~/marstenHouse$ ls
kitchen
roderick@RsLinux:~/marstenHouse$ pwd
/home/roderick/marstenHouse
roderick@RsLinux:~/marstenHouse$ ls -a
.  ..  .key5  kitchen
roderick@RsLinux:~/marstenHouse$ realpath ".key5"
/home/roderick/marstenHouse/.key5
roderick@RsLinux:~/marstenHouse$ |
```

```
1/1 v + [ ] [ ] ...rick@RsLinux: ~/marstenHouse/kitchen/dining_room/basement
1: roderick@RsLinux: ~/marstenHouse/kitchen/dining_room/basement v
roderick@RsLinux:~/marstenHouse$ ls -a
.  ..  .key5  kitchen
roderick@RsLinux:~/marstenHouse$ realpath ".key5"
/home/roderick/marstenHouse/.key5
roderick@RsLinux:~/marstenHouse$ cd kitchen
roderick@RsLinux:~/marstenHouse/kitchen$ ls
dining_room
roderick@RsLinux:~/marstenHouse/kitchen$ ls -a
.  ..  dining_room  .key2
roderick@RsLinux:~/marstenHouse/kitchen$ realpath ".key2"
/home/roderick/marstenHouse/kitchen/.key2
roderick@RsLinux:~/marstenHouse/kitchen$ cd dining_room/
roderick@RsLinux:~/marstenHouse/kitchen/dining_room$ ls -a
.  ..  basement  dining_room  .key4  library  master_bedroom
roderick@RsLinux:~/marstenHouse/kitchen/dining_room$ realpath ".key4"
/home/roderick/marstenHouse/kitchen/dining_room/.key4
roderick@RsLinux:~/marstenHouse/kitchen/dining_room$ cd basement/
roderick@RsLinux:~/marstenHouse/kitchen/dining_room/basement$ ls -a
.  ..  .key1  .key3
roderick@RsLinux:~/marstenHouse/kitchen/dining_room/basement$ realpath ".key1"
/home/roderick/marstenHouse/kitchen/dining_room/basement/.key1
roderick@RsLinux:~/marstenHouse/kitchen/dining_room/basement$ realpath ".key3"
/home/roderick/marstenHouse/kitchen/dining_room/basement/.key3
roderick@RsLinux:~/marstenHouse/kitchen/dining_room/basement$ |
```

```
1/1 + [ ] [ ] Tilix: roderick@RsLinux: ~/marstenHouse [ ] [ ] [ ] [ ]
1: roderick@RsLinux: ~/marstenHouse [ ] [ ]
/home/roderick/marstenHouse/kitchen/dining_room/basement/.key1
roderick@RsLinux:~/marstenHouse/kitchen/dining_room/basement$ realpath ".key3"
/home/roderick/marstenHouse/kitchen/dining_room/basement/.key3
roderick@RsLinux:~/marstenHouse/kitchen/dining_room/basement$ cd marstenHouse
bash: cd: marstenHouse: No such file or directory
roderick@RsLinux:~/marstenHouse/kitchen/dining_room/basement$ ../../../../
bash: ../../../../: Is a directory
roderick@RsLinux:~/marstenHouse/kitchen/dining_room/basement$ cd ../../../../
roderick@RsLinux:~/marstenHouse$ tree -a
.
├── .key5
├── kitchen
│   ├── dining_room
│   │   ├── basement
│   │   │   ├── .key1
│   │   │   └── .key3
│   │   ├── dining_room
│   │   ├── .key4
│   │   ├── library
│   │   └── master_bedroom
│   └── .key2
7 directories, 5 files
roderick@RsLinux:~/marstenHouse$ |
```