

# Week Report 5

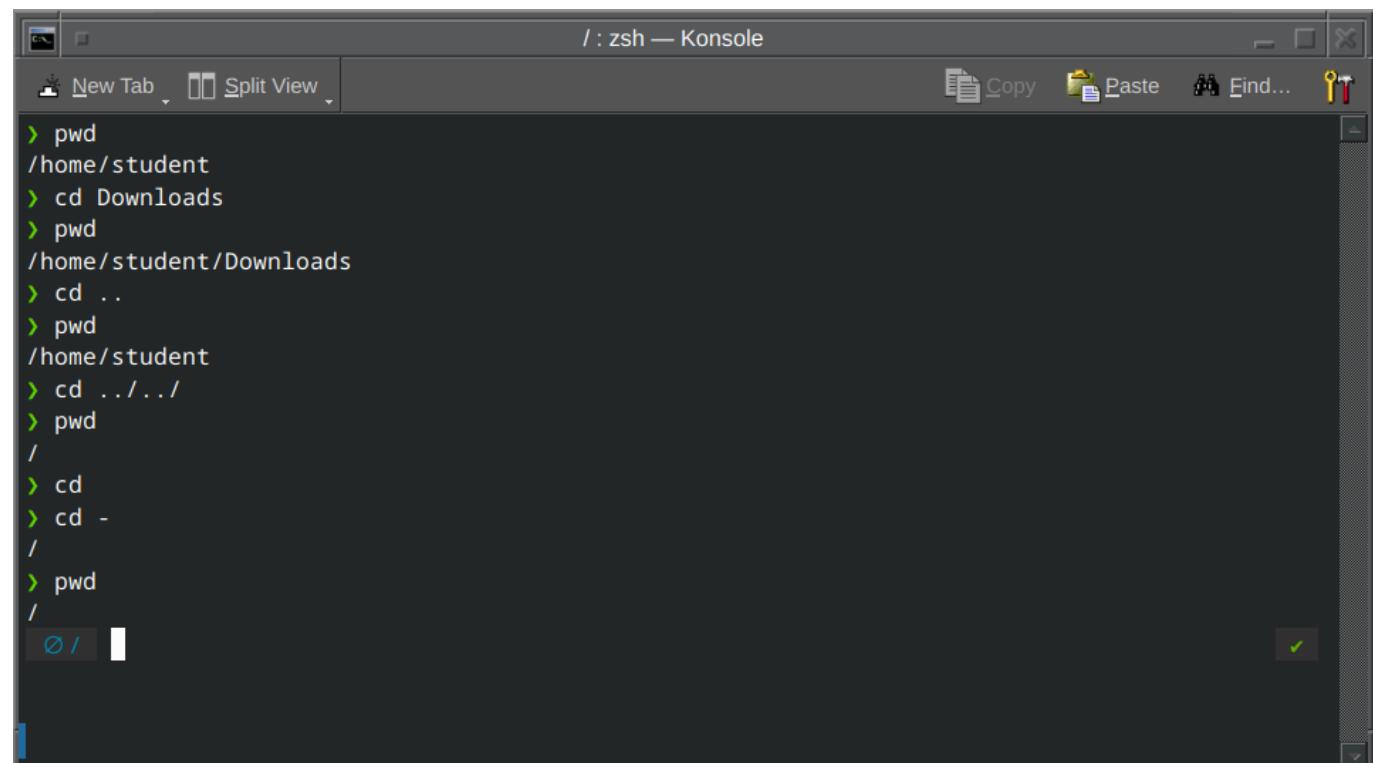
## Completed work for week 5:

- [Lab 5](#)
- [Notes 5](#)

## Practice Screenshots

### Linux Filesystem

#### Practice 1



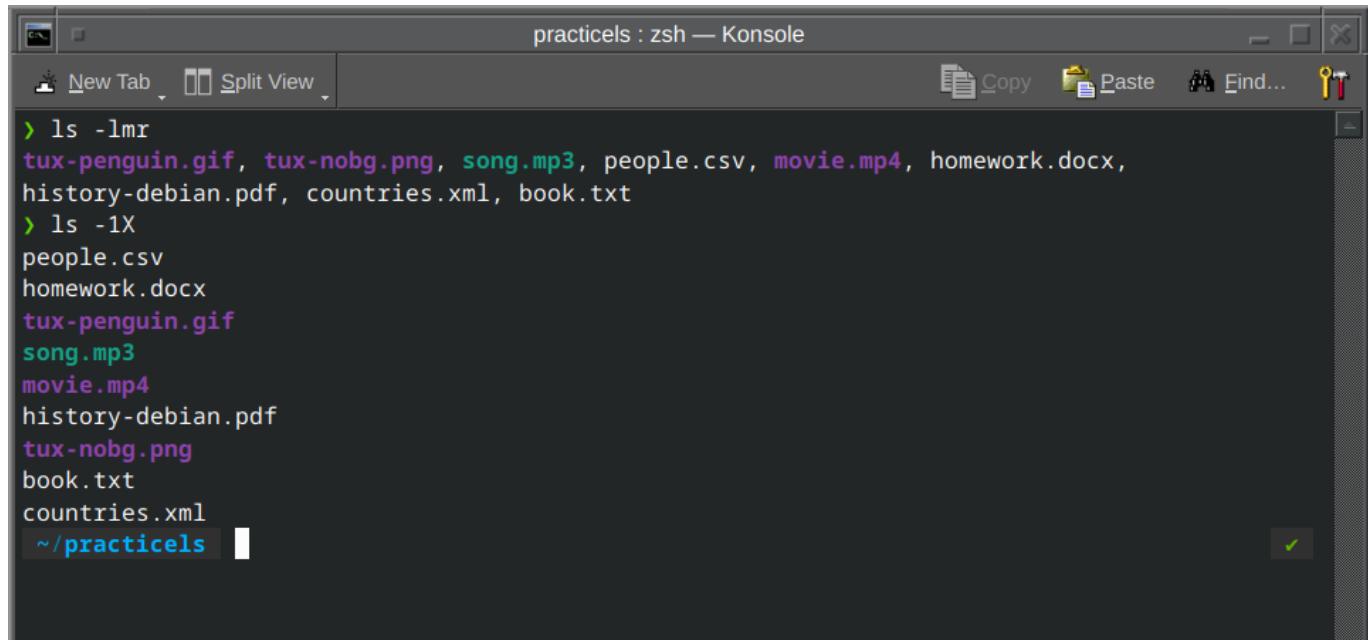
The screenshot shows a terminal window with the title bar 'zsh — Konsole'. The window contains the following command-line session:

```
> pwd  
/home/student  
> cd Downloads  
> pwd  
/home/student/Downloads  
> cd ..  
> pwd  
/home/student  
> cd ../../..  
> pwd  
/  
> cd  
> cd -  
/  
> pwd  
/  
∅ /
```

#### Practice 2

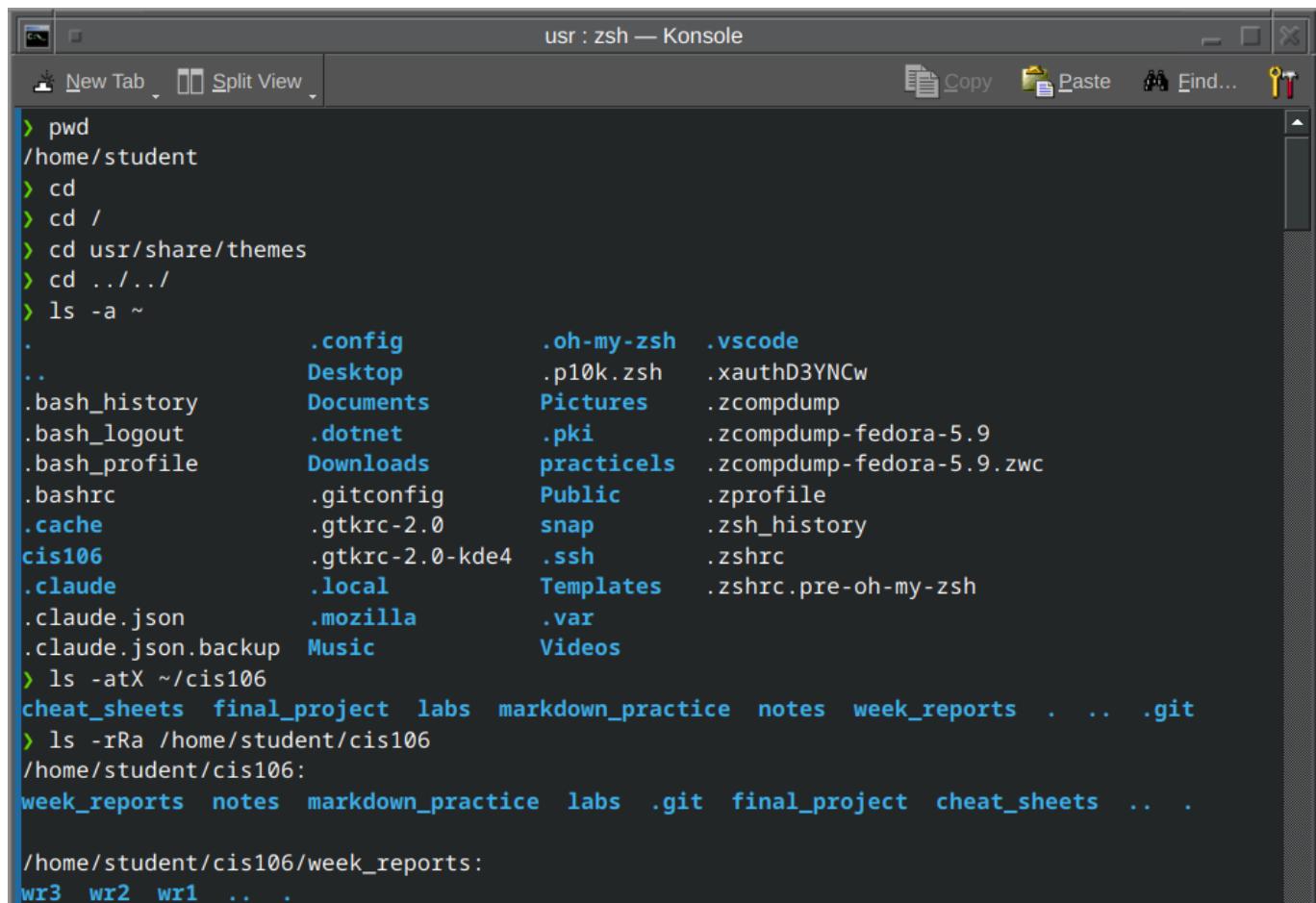
```
practicels : zsh — Konsole
New Tab Split View Copy Paste Find... Tools
> ls
book.txt      history-debian.pdf  movie.mp4   song.mp3      tux-penguin.gif
countries.xml homework.docx       people.csv    tux-nobg.png
> ls -a
.  book.txt      history-debian.pdf  movie.mp4   song.mp3      tux-penguin.gif
.. countries.xml homework.docx       people.csv    tux-nobg.png
> ls -l
total 2932
-rw-r--r--. 1 student student    1043 Feb 27 2022 book.txt
-rw-r--r--. 1 student student   23972 Feb 27 2022 countries.xml
-rw-r--r--. 1 student student  163057 Feb 27 2022 history-debian.pdf
-rw-r--r--. 1 student student  111303 Feb 22 2022 homework.docx
-rw-r--r--. 1 student student 1570024 Feb 27 2022 movie.mp4
-rw-r--r--. 1 student student 284042 Feb 27 2022 people.csv
-rw-r--r--. 1 student student  764176 Feb 27 2022 song.mp3
-rw-r--r--. 1 student student   21314 Feb 27 2022 tux-nobg.png
-rw-r--r--. 1 student student   44299 Jan 31 2020 tux-penguin.gif
> ls -lh
total 2.9M
-rw-r--r--. 1 student student  1.1K Feb 27 2022 book.txt
-rw-r--r--. 1 student student   24K Feb 27 2022 countries.xml
-rw-r--r--. 1 student student  160K Feb 27 2022 history-debian.pdf
-rw-r--r--. 1 student student  109K Feb 22 2022 homework.docx
-rw-r--r--. 1 student student  1.5M Feb 27 2022 movie.mp4
-rw-r--r--. 1 student student  278K Feb 27 2022 people.csv
-rw-r--r--. 1 student student  747K Feb 27 2022 song.mp3
-rw-r--r--. 1 student student   21K Feb 27 2022 tux-nobg.png
-rw-r--r--. 1 student student   44K Jan 31 2020 tux-penguin.gif
~/practicels
```

```
practicels : zsh — Konsole
New Tab Split View Copy Paste Find... Tools
> ls -lht
total 2.9M
-rw-r--r--. 1 student student  24K Feb 27 2022 countries.xml
-rw-r--r--. 1 student student  278K Feb 27 2022 people.csv
-rw-r--r--. 1 student student  747K Feb 27 2022 song.mp3
-rw-r--r--. 1 student student  1.5M Feb 27 2022 movie.mp4
-rw-r--r--. 1 student student  160K Feb 27 2022 history-debian.pdf
-rw-r--r--. 1 student student   21K Feb 27 2022 tux-nobg.png
-rw-r--r--. 1 student student  1.1K Feb 27 2022 book.txt
-rw-r--r--. 1 student student  109K Feb 22 2022 homework.docx
-rw-r--r--. 1 student student   44K Jan 31 2020 tux-penguin.gif
> ls -oghS
total 2.9M
-rw-r--r--. 1 1.5M Feb 27 2022 movie.mp4
-rw-r--r--. 1 747K Feb 27 2022 song.mp3
-rw-r--r--. 1 278K Feb 27 2022 people.csv
-rw-r--r--. 1 160K Feb 27 2022 history-debian.pdf
-rw-r--r--. 1 109K Feb 22 2022 homework.docx
-rw-r--r--. 1 44K Jan 31 2020 tux-penguin.gif
-rw-r--r--. 1 24K Feb 27 2022 countries.xml
-rw-r--r--. 1 21K Feb 27 2022 tux-nobg.png
-rw-r--r--. 1 1.1K Feb 27 2022 book.txt
~/practicels
```

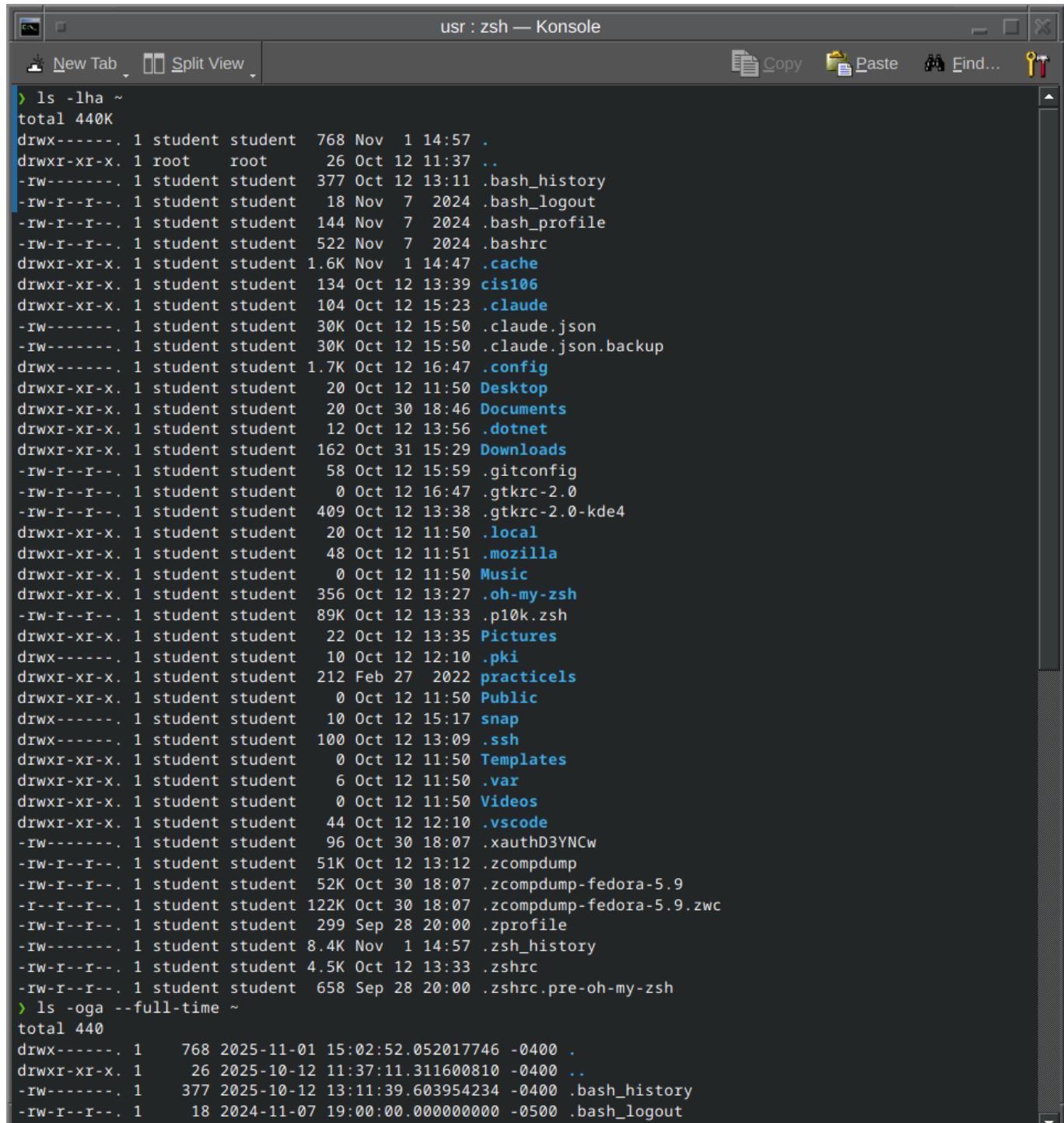


```
practicels : zsh — Konsole
New Tab Split View Copy Paste Find... Tools
> ls -lmr
tux-penguin.gif, tux-nobg.png, song.mp3, people.csv, movie.mp4, homework.docx,
history-debian.pdf, countries.xml, book.txt
> ls -1X
people.csv
homework.docx
tux-penguin.gif
song.mp3
movie.mp4
history-debian.pdf
tux-nobg.png
book.txt
countries.xml
~/practicels
```

### Practice 3



```
usr : zsh — Konsole
New Tab Split View Copy Paste Find... Tools
> pwd
/home/student
> cd
> cd /
> cd usr/share/themes
> cd ../../
> ls -a ~
.
..
.config .oh-my-zsh .vscode
Desktop .p10k.zsh .xauthD3YNCw
Documents Pictures .zcompdump
.dotnet .pki .zcompdump-fedora-5.9
Downloads practicels .zcompdump-fedora-5.9.zwc
.gitconfig .gtkrc-2.0 Public .zprofile
.cache .gtkrc-2.0-kde4 snap .zsh_history
cis106 .gtkrc-2.0-kde4 .ssh .zshrc
.claude .local Templates .zshrc.pre-oh-my-zsh
.claude.json .mozilla .var
.claude.json.backup Music Videos
> ls -atX ~/cis106
cheat_sheets final_project labs markdown_practice notes week_reports . . . .git
> ls -rRa /home/student/cis106
/home/student/cis106:
week_reports notes markdown_practice labs .git final_project cheat_sheets . . .
/home/student/cis106/week_reports:
wr3 wr2 wr1 . . .
```



The screenshot shows a terminal window titled "usr : zsh — Konsole". The window contains a command-line session where the user runs two "ls" commands. The first command, "ls -lha ~", lists all files in the current directory (~) with detailed information: permissions (e.g., drwxr-xr-x), ownership (student/student), size (e.g., 768, 26, 377, ...), modification date (Nov 1, Oct 12, Oct 30, ...), and names (e.g., ., .., .bash\_history, .bash\_logout, .bash\_profile, .bashrc, .cache, .cis106, .claudie, .claude.json, .claude.json.backup, .config, Desktop, Documents, .dotnet, Downloads, .gitconfig, .gtkrc-2.0, .gtkrc-2.0-kde4, .local, .mozilla, .Music, .oh-my-zsh, .p10k.zsh, .Pictures, .pki, .practicels, .Public, .snap, .ssh, .Templates, .var, .Videos, .vscode, .xauthD3YNCw, .zcompdump, .zcompdump-fedora-5.9, .zcompdump-fedora-5.9.zwc, .zprofile, .zsh\_history, .zshrc, .zshrc.pre-oh-my-zsh). The second command, "ls -oga --full-time ~", lists the same files but includes full timestamps for each entry.

```
> ls -lha ~
total 440K
drwx----- 1 student student 768 Nov  1 14:57 .
drwxr-xr-x  1 root    root    26 Oct 12 11:37 ..
-rw----- 1 student student 377 Oct 12 13:11 .bash_history
-rw-r--r-- 1 student student 18 Nov  7 2024 .bash_logout
-rw-r--r-- 1 student student 144 Nov  7 2024 .bash_profile
-rw-r--r-- 1 student student 522 Nov  7 2024 .bashrc
drwxr-xr-x 1 student student 1.6K Nov  1 14:47 .cache
drwxr-xr-x 1 student student 134 Oct 12 13:39 cis106
drwxr-xr-x 1 student student 104 Oct 12 15:23 .claudie
-rw----- 1 student student 30K Oct 12 15:50 .claude.json
-rw----- 1 student student 30K Oct 12 15:50 .claude.json.backup
drwx----- 1 student student 1.7K Oct 12 16:47 .config
drwxr-xr-x 1 student student 20 Oct 12 11:50 Desktop
drwxr-xr-x 1 student student 20 Oct 30 18:46 Documents
drwxr-xr-x 1 student student 12 Oct 12 13:56 .dotnet
drwxr-xr-x 1 student student 162 Oct 31 15:29 Downloads
-rw-r--r-- 1 student student 58 Oct 12 15:59 .gitconfig
-rw-r--r-- 1 student student 0 Oct 12 16:47 .gtkrc-2.0
-rw-r--r-- 1 student student 409 Oct 12 13:38 .gtkrc-2.0-kde4
drwxr-xr-x 1 student student 20 Oct 12 11:50 .local
drwxr-xr-x 1 student student 48 Oct 12 11:51 .mozilla
drwxr-xr-x 1 student student 0 Oct 12 11:50 .Music
drwxr-xr-x 1 student student 356 Oct 12 13:27 .oh-my-zsh
-rw-r--r-- 1 student student 89K Oct 12 13:33 .p10k.zsh
drwxr-xr-x 1 student student 22 Oct 12 13:35 .Pictures
drwx----- 1 student student 10 Oct 12 12:10 .pki
drwxr-xr-x 1 student student 212 Feb 27 2022 .practicels
drwxr-xr-x 1 student student 0 Oct 12 11:50 .Public
drwx----- 1 student student 10 Oct 12 15:17 .snap
drwx----- 1 student student 100 Oct 12 13:09 .ssh
drwxr-xr-x 1 student student 0 Oct 12 11:50 .Templates
drwxr-xr-x 1 student student 6 Oct 12 11:50 .var
drwxr-xr-x 1 student student 0 Oct 12 11:50 .Videos
drwxr-xr-x 1 student student 44 Oct 12 12:10 .vscode
-rw----- 1 student student 96 Oct 30 18:07 .xauthD3YNCw
-rw-r--r-- 1 student student 51K Oct 12 13:12 .zcompdump
-rw-r--r-- 1 student student 52K Oct 30 18:07 .zcompdump-fedora-5.9
-rw-r--r-- 1 student student 122K Oct 30 18:07 .zcompdump-fedora-5.9.zwc
-rw-r--r-- 1 student student 299 Sep 28 20:00 .zprofile
-rw----- 1 student student 8.4K Nov  1 14:57 .zsh_history
-rw-r--r-- 1 student student 4.5K Oct 12 13:33 .zshrc
-rw-r--r-- 1 student student 658 Sep 28 20:00 .zshrc.pre-oh-my-zsh
> ls -oga --full-time ~
total 440
drwx----- 1 768 2025-11-01 15:02:52.052017746 -0400 .
drwxr-xr-x  1 26 2025-10-12 11:37:11.311600810 -0400 ..
-rw----- 1 377 2025-10-12 13:11:39.603954234 -0400 .bash_history
-rw-r--r-- 1 18 2024-11-07 19:00:00.000000000 -0500 .bash_logout
```

## Shell Scripting Practice 1

### env Variable practice

```
> cd ~/scripts
> nvim script_env_var.sh
> ls
script_env_var.sh
> cat script_env_var.sh
#!/bin/bash
echo "Current user is $USER"
echo "Current shell is $SHELL"
echo "Current home directory is $HOME"
echo "The path is $PATH"
> chmod +x script_env_var.sh
> ./script_env_var.sh
Current user is student
Current shell is /usr/bin/zsh
Current home directory is /home/student
The path is /usr/local/bin:/usr/bin:/bin:/usr/local/sbin:/usr/sbin:/sbin:/var/lib/snapd/snap
```

## User variable practice

The screenshot shows a terminal window titled "scripts : zsh — Konsole". The terminal interface includes a toolbar with "New Tab", "Split View", "Copy", "Paste", "Find...", and a search icon. The command entered is ". ./script\_usr\_var.sh". The output displays "User Info" followed by four lines of user data: Name: Bob Smith, Age: 55, Email: smith.bob@protonmail.com, and Phone: 862-863-2201. The terminal prompt at the bottom is "~/.scripts".

```
scripts : zsh — Konsole
New Tab Split View Copy Paste Find...
> . ./script_usr_var.sh
User Info
    Name: Bob Smith
    Age: 55
    Email: smith.bob@protonmail.com
    Phone: 862-863-2201
~/scripts
```