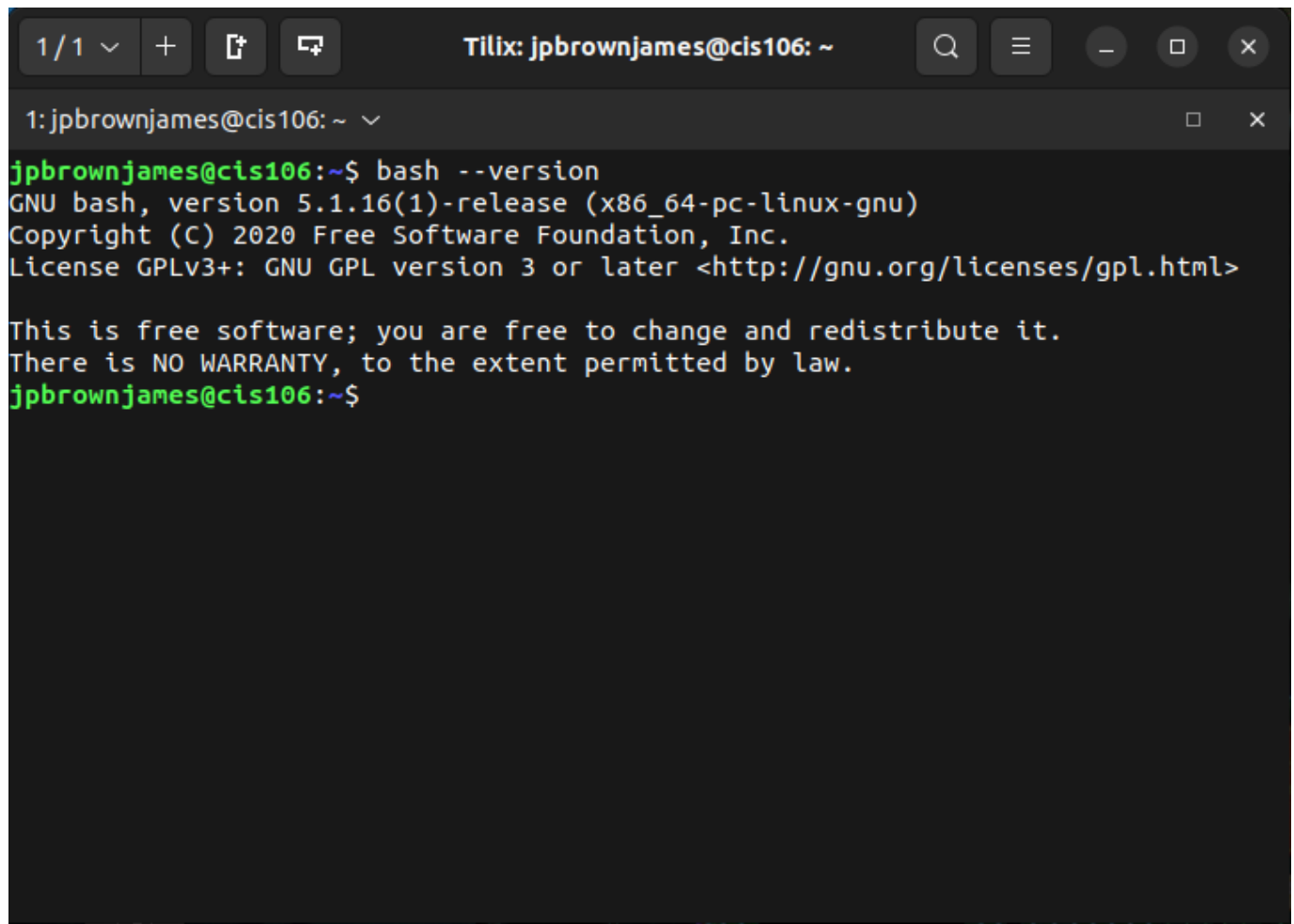


Week Report 3

Completed work for week 3

- [Lab 3](#)
- [Notes 1](#)

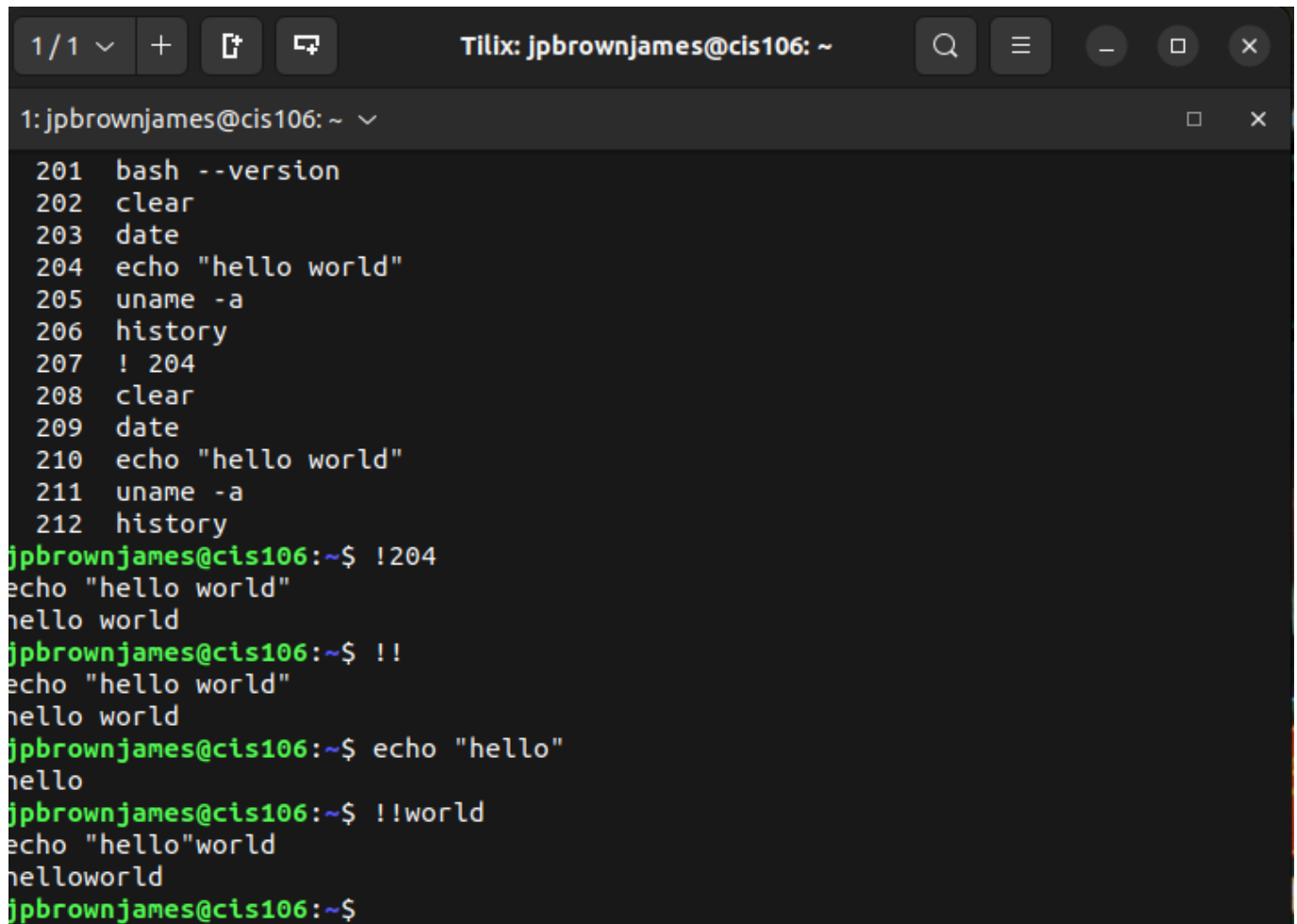
Practice 2: Accessing the bash shell



The screenshot shows a terminal window titled "Tilix: jpbrownjames@cis106: ~". The terminal content is as follows:

```
1:jpbrownjames@cis106: ~  
jpbrownjames@cis106:~$ bash --version  
GNU bash, version 5.1.16(1)-release (x86_64-pc-linux-gnu)  
Copyright (C) 2020 Free Software Foundation, Inc.  
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>  
  
This is free software; you are free to change and redistribute it.  
There is NO WARRANTY, to the extent permitted by law.  
jpbrownjames@cis106:~$
```

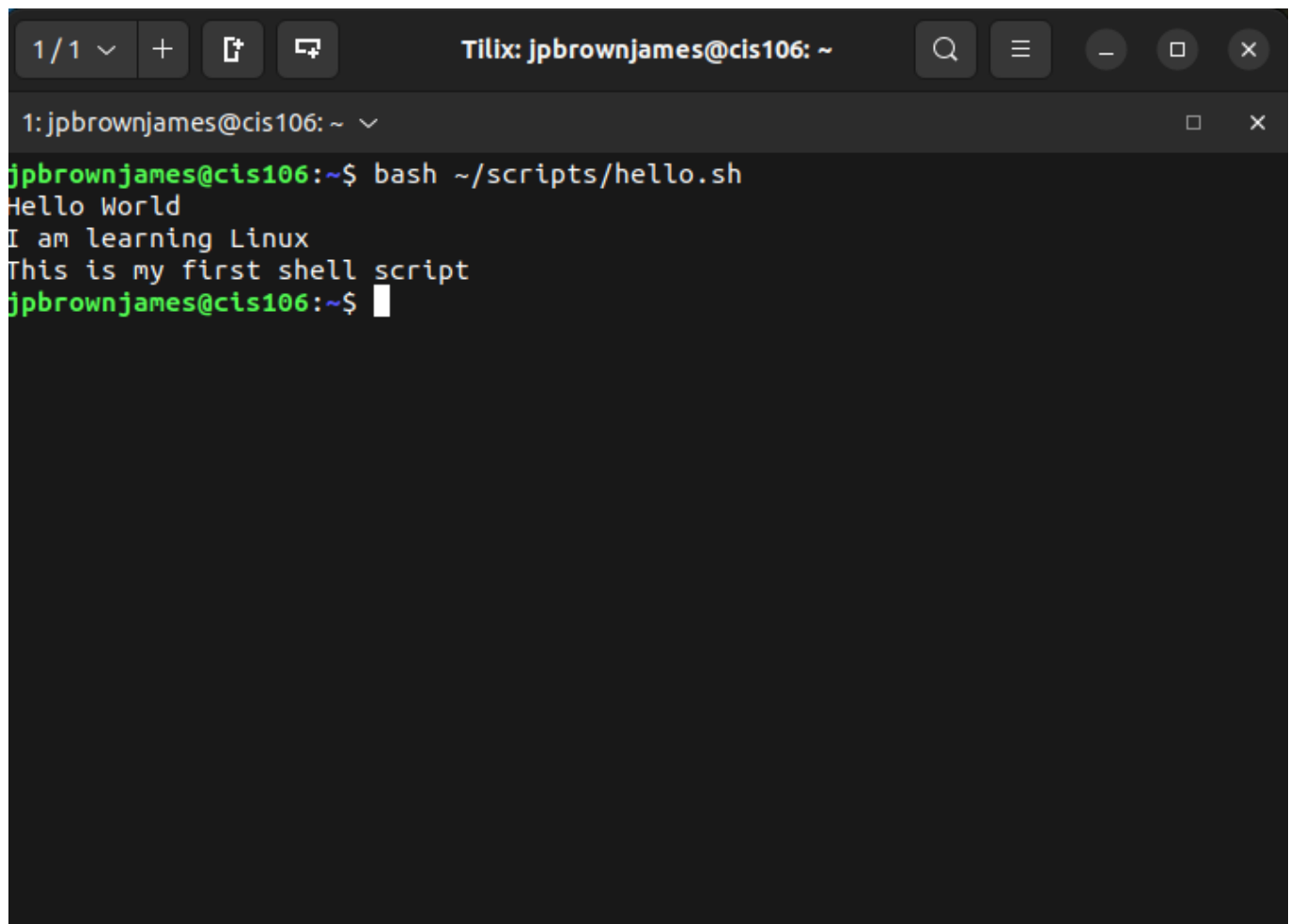
Practice 3: Using the command history



The screenshot shows a Tilix terminal window titled "Tilix: jpbrownjames@cis106: ~". The terminal displays a list of commands and their outputs, numbered 201 through 212. The commands include `bash --version`, `clear`, `date`, `echo "hello world"`, `uname -a`, `history`, and `! 204`. The output of `! 204` is `echo "hello world"` followed by `hello world`. The prompt `jpbrownjames@cis106:~$` is shown in green. The terminal window has a dark background and a light-colored border.

```
1/1  +  [?]  [?]  Tilix: jpbrownjames@cis106: ~  [Q]  [≡]  [−]  [□]  [×]
1:jpbrownjames@cis106: ~  [□]  [×]
201  bash --version
202  clear
203  date
204  echo "hello world"
205  uname -a
206  history
207  ! 204
208  clear
209  date
210  echo "hello world"
211  uname -a
212  history
jpbrownjames@cis106:~$ !204
echo "hello world"
hello world
jpbrownjames@cis106:~$ !!
echo "hello world"
hello world
jpbrownjames@cis106:~$ echo "hello"
hello
jpbrownjames@cis106:~$ !!world
echo "hello"world
helloworld
jpbrownjames@cis106:~$
```

Practice 4: My First Shell Script

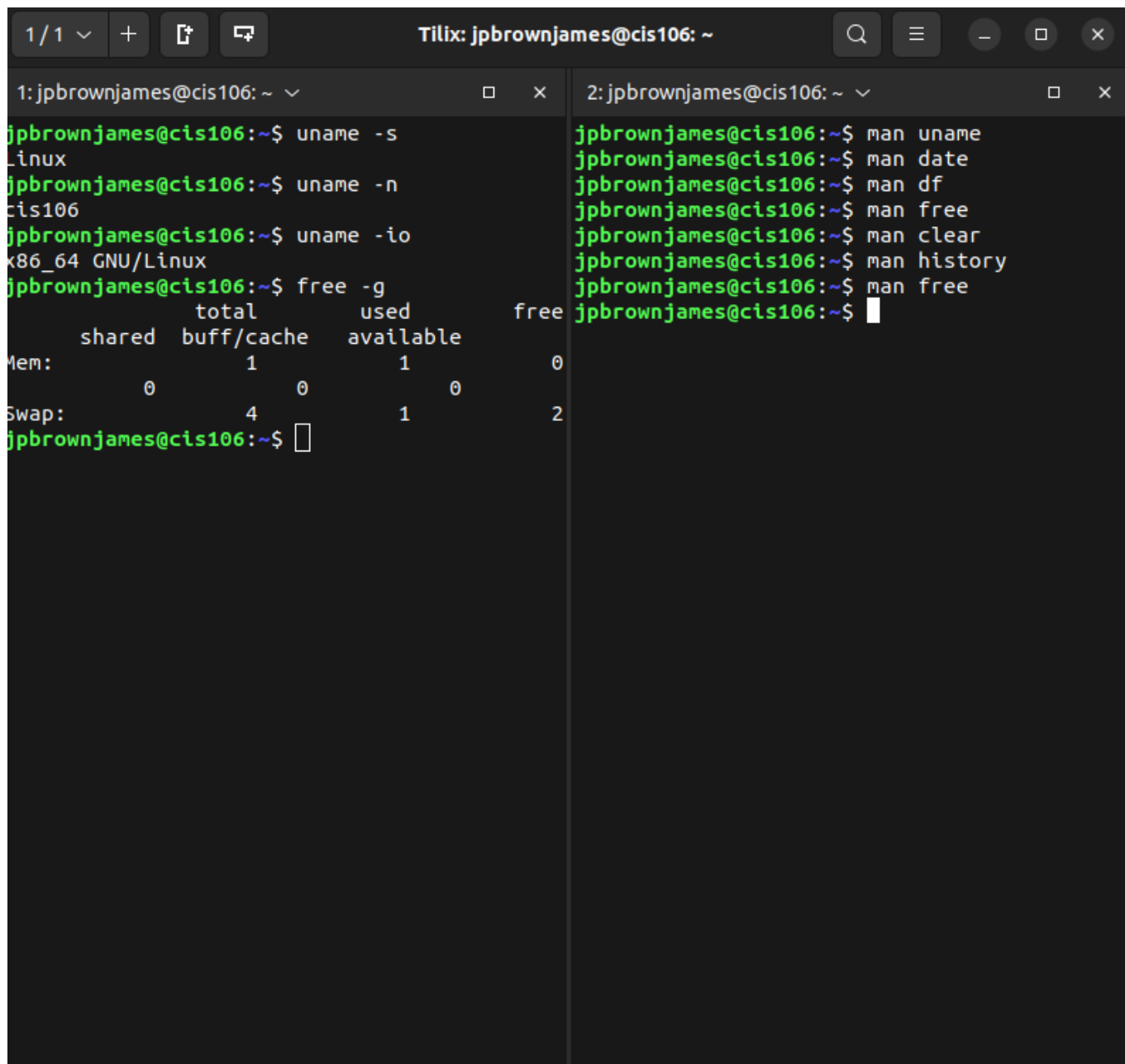
A terminal window titled 'Tilix: jpbrownjames@cis106: ~'. The window shows a shell script being executed. The prompt is 'jpbrownjames@cis106:~\$'. The command entered is 'bash ~/scripts/hello.sh'. The output of the script is: 'Hello World', 'I am learning Linux', and 'This is my first shell script'. The prompt returns to 'jpbrownjames@cis106:~\$' with a cursor. The terminal window has a dark background and a light-colored text. The title bar shows standard window controls (minimize, maximize, close) and a search icon. The top bar shows the window title and a search icon.

```
1 / 1  +  [icon] [icon]  Tilix: jpbrownjames@cis106: ~  [search] [menu] [minimize] [maximize] [close]

1: jpbrownjames@cis106: ~  [icon] [close]

jpbrownjames@cis106:~$ bash ~/scripts/hello.sh
Hello World
I am learning Linux
This is my first shell script
jpbrownjames@cis106:~$
```

Practice 5: Using man



The screenshot shows a Tmux terminal window with two panes. The title bar indicates the session is named 'Tmux: jpbrownjames@cis106: ~'. The left pane (1: jpbrownjames@cis106: ~) shows the following commands and output:

```
jpbrownjames@cis106:~$ uname -s
Linux
jpbrownjames@cis106:~$ uname -n
cis106
jpbrownjames@cis106:~$ uname -io
x86_64 GNU/Linux
jpbrownjames@cis106:~$ free -g
```

	total	used	free
Mem:	shared buff/cache	available	
	0	1	0
Swap:	4	1	2

The right pane (2: jpbrownjames@cis106: ~) shows the following commands and output:

```
jpbrownjames@cis106:~$ man uname
jpbrownjames@cis106:~$ man date
jpbrownjames@cis106:~$ man df
jpbrownjames@cis106:~$ man free
jpbrownjames@cis106:~$ man clear
jpbrownjames@cis106:~$ man history
jpbrownjames@cis106:~$ man free
jpbrownjames@cis106:~$
```

Practice 6: Using the help option

```

1/1  +  [T] [C]  Tilix: jpbrownjames@cis106: ~  [Q] [≡] [–] [□] [×]
1:jpbrownjames@cis106: ~  AI [□] [×]
jpbrownjames@cis106:~$ free --help

Usage:
free [options]

Options:
-b, --bytes          show output in bytes
--kilo              show output in kilobytes
--mega             show output in megabytes
--giga             show output in gigabytes
--tera            show output in terabytes
--peta            show output in petabytes
-k, --kibi          show output in kibibytes
-m, --mebi          show output in mebibytes
-g, --gibi          show output in gibibytes
--tebi            show output in tebibytes
--pebi            show output in pebibytes
-h, --human          show human-readable output
--si              use powers of 1000 not 1024
-l, --lohi          show detailed low and high memory statistics
-t, --total          show total for RAM + swap
-s N, --seconds N    repeat printing every N seconds
-c N, --count N      repeat printing N times, then exit
-w, --wide           wide output

--help             display this help and exit
-V, --version       output version information and exit

For more details see free(1).
jpbrownjames@cis106:~$ man --help
Usage: man [OPTION...] [SECTION] PAGE...

-C, --config-file=FILE    use this user configuration file
-d, --debug               emit debugging messages
-D, --default              reset all options to their default values
--warnings[=WARNINGS]    enable warnings from groff

```

```

1/1  +  [T] [C]  Tilix: jpbrownjames@cis106: ~  [Q] [≡] [–] [□] [×]
1:jpbrownjames@cis106: ~  AI [□] [×]
jpbrownjames@cis106:~$ date --help
Usage: date [OPTION]... [+FORMAT]
or: date [-u|--utc|--universal] [MMDDhhmm[[CC]YY][.ss]]
display the current time in the given FORMAT, or set the system date.

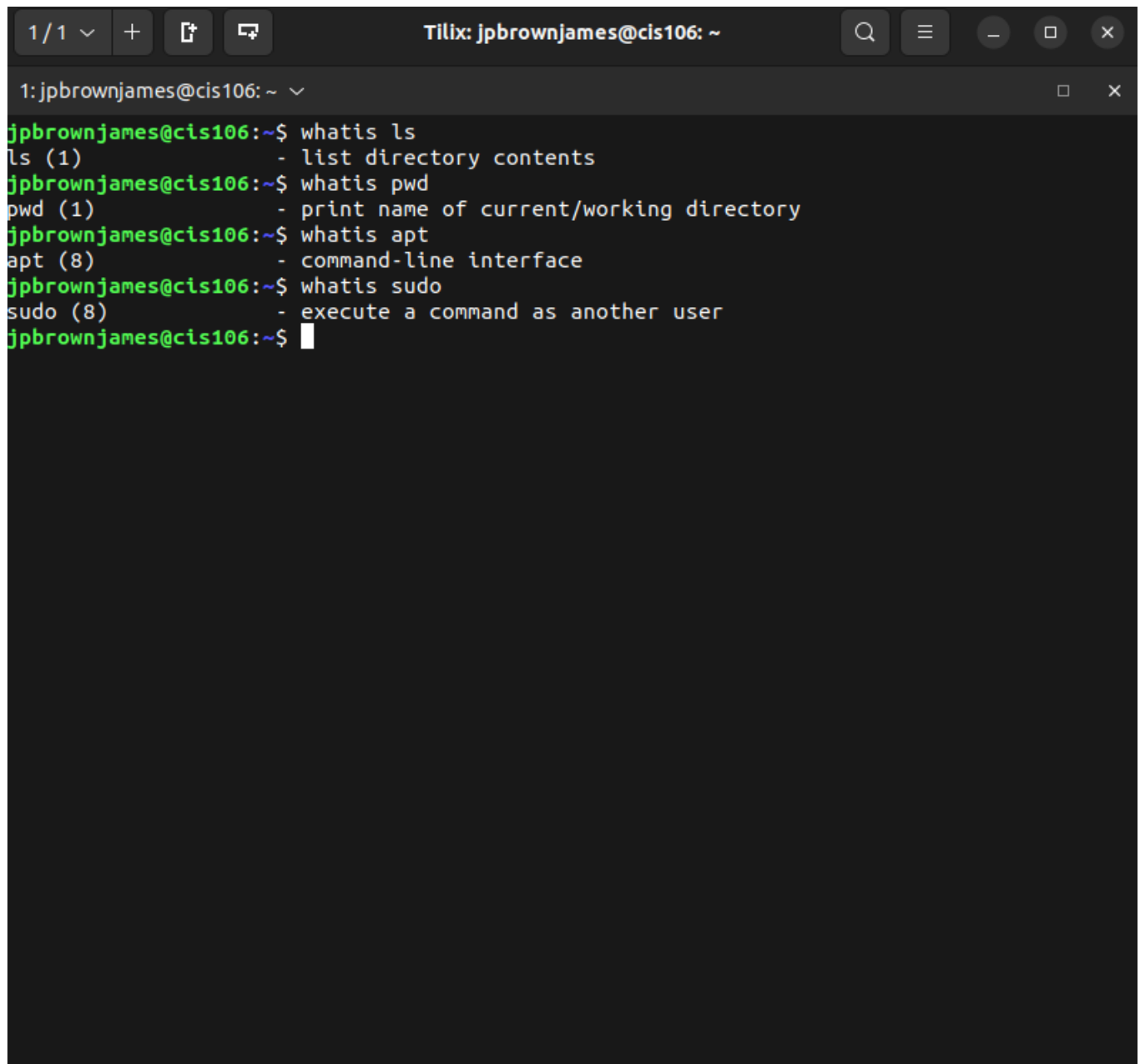
Mandatory arguments to long options are mandatory for short options too.
-d, --date=STRING          display time described by STRING, not 'now'
--debug                    annotate the parsed date,
                           and warn about questionable usage to stderr
-f, --file=DATEFILE        like --date; once for each line of DATEFILE
-I[FMT], --iso-8601[=FMT] output date/time in ISO 8601 format.
                           FMT='date' for date only (the default),
                           'hours', 'minutes', 'seconds', or 'ns'
                           for date and time to the indicated precision.
                           Example: 2006-08-14T02:34:56-06:00
-R, --rfc-email            output date and time in RFC 5322 format.
                           Example: Mon, 14 Aug 2006 02:34:56 -0600
--rfc-3339=FMT            output date/time in RFC 3339 format.
                           FMT='date', 'seconds', or 'ns'
                           for date and time to the indicated precision.
                           Example: 2006-08-14 02:34:56-06:00

```

```
Example: 2000-08-14 02:34:30-00:00
-r, --reference=FILE      display the last modification time of FILE
-s, --set=STRING          set time described by STRING
-u, --utc, --universal    print or set Coordinated Universal Time (UTC)
--help                    display this help and exit
--version                  output version information and exit
```

FORMAT controls the output. Interpreted sequences are:

```
%%      a literal %
%a      locale's abbreviated weekday name (e.g., Sun)
%A      locale's full weekday name (e.g., Sunday)
%b      locale's abbreviated month name (e.g., Jan)
%B      locale's full month name (e.g., January)
%c      locale's date and time (e.g., Thu Mar 3 23:05:25 2005)
%C      century; like %Y, except omit last two digits (e.g., 20)
%d      day of month (e.g., 01)
```



The screenshot shows a Tilix terminal window titled "Tilix: jpbrownjames@cis106: ~". The terminal displays the following commands and their outputs:

```
jpbrownjames@cis106:~$ whatis ls
ls (1)                - list directory contents
jpbrownjames@cis106:~$ whatis pwd
pwd (1)               - print name of current/working directory
jpbrownjames@cis106:~$ whatis apt
apt (8)               - command-line interface
jpbrownjames@cis106:~$ whatis sudo
sudo (8)              - execute a command as another user
jpbrownjames@cis106:~$
```

Practice 7: Cheat!


```
1/1 ▾ + [ ] [ ] Tilix: jpbrownjames@cis106: ~ 🔍 ☰ - □ ×
1:jpbrownjames@cis106: ~ ▾ AI □ ×
jpbrownjames@cis106:~$ sudo snap install cheat
[sudo] password for jpbrownjames:
snap "cheat" is already installed, see 'snap help refresh'
jpbrownjames@cis106:~$ cheat apt
# To find packages matching <phrase>:
apt search <phrase>

# To show information on a package:
apt show <package>

# To fetch package list:
apt update

# To download and install the updates and (UNLIKE apt-get) install new necessary packages:
apt upgrade

# To download and install the updates AND install new necessary packages
# AND remove packages that stand in the way of the upgrade - use with caution:
apt dist-upgrade

# To perform a full system upgrade:
apt update && apt upgrade # use dist-upgrade carefully if needed

# To install package(s):
apt install <package>...

# To uninstall package(s):
apt remove <package>...

# To remove automatically all unused packages:
apt autoremove

# To list dependencies of a package:
apt depends <package>...

# To remove packages and delete their config files:
```

```
1/1 ▾ + [ ] [ ] Tilix: jpbrownjames@cis106: ~ 🔍 ☰ - □ ×
1:jpbrownjames@cis106: ~ ▾ AI □ ×
jpbrownjames@cis106:~$ cheat git
# To set your identity:
git config --global user.name <name>
git config --global user.email <email>

# To set your editor:
git config --global core.editor <editor>

# To enable color:
git config --global color.ui true

# To stage all changes for commit:
git add --all

# To stash changes locally, this will keep the changes in a separate changelist
# called stash and the working directory is cleaned. You can apply changes
# from the stash anytime
git stash

# To stash changes with a message:
```



```
git stash push -m <message>

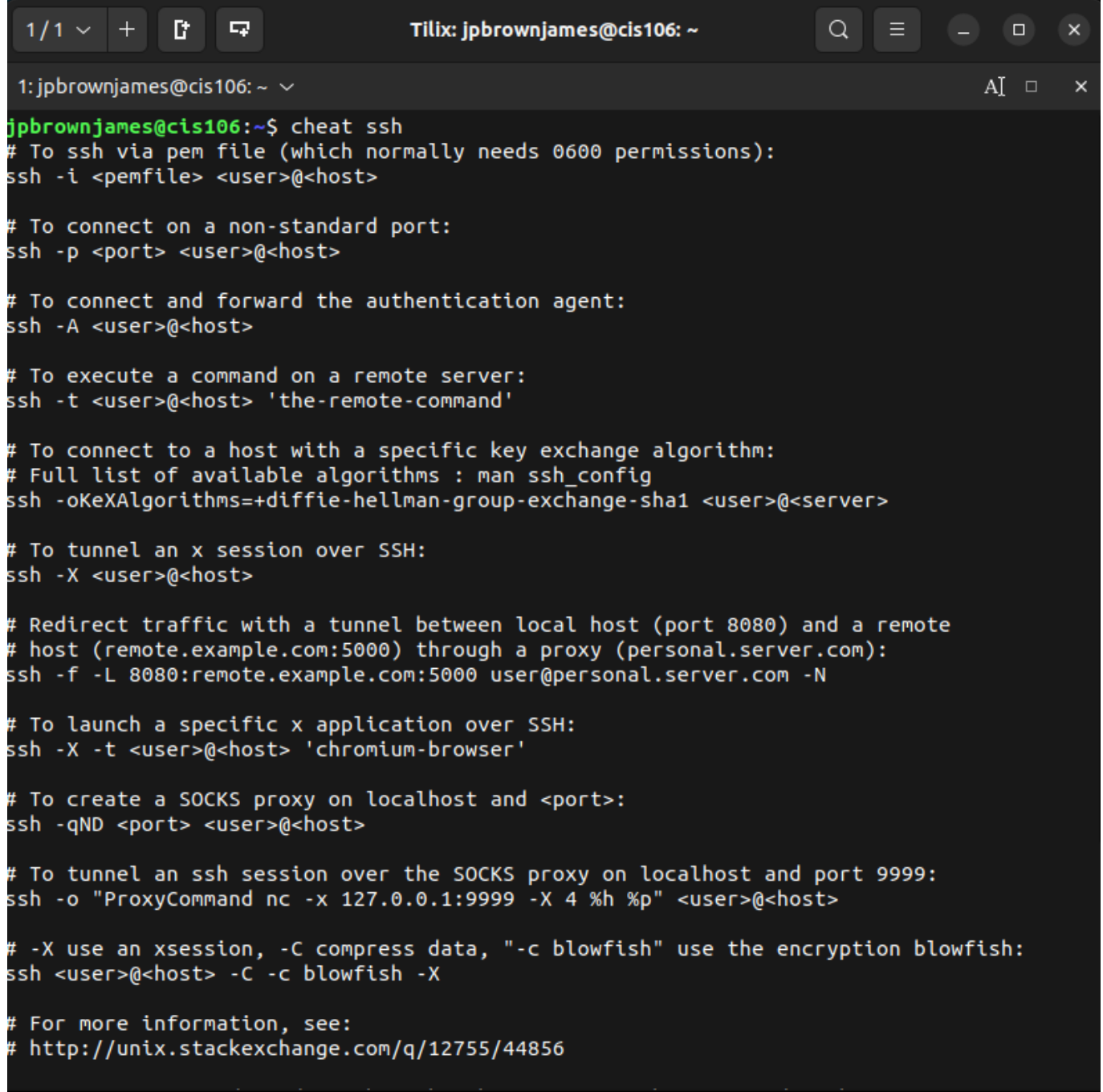
# To list all the stashed changes:
git stash list

# To apply the most recent change and remove the stash from the stash list:
git stash pop

# To apply any stash from the list of stashes. This does not remove the stash
# from the stash list
git stash apply stash@{6}

# To commit staged changes:
git commit -m <message>

# To edit previous commit message:
git commit --amend
```



```
1/1  +  [T]  [C]  Tilix: jpbrownjames@cis106: ~  [Q]  [≡]  [–]  [□]  [X]

1:jpbrownjames@cis106: ~  AI  □  X

jpbrownjames@cis106:~$ cheat ssh
# To ssh via pem file (which normally needs 0600 permissions):
ssh -i <pemfile> <user>@<host>

# To connect on a non-standard port:
ssh -p <port> <user>@<host>

# To connect and forward the authentication agent:
ssh -A <user>@<host>

# To execute a command on a remote server:
ssh -t <user>@<host> 'the-remote-command'

# To connect to a host with a specific key exchange algorithm:
# Full list of available algorithms : man ssh_config
ssh -oKexAlgorithms=+diffie-hellman-group-exchange-sha1 <user>@<server>

# To tunnel an x session over SSH:
ssh -X <user>@<host>

# Redirect traffic with a tunnel between local host (port 8080) and a remote
# host (remote.example.com:5000) through a proxy (personal.server.com):
ssh -f -L 8080:remote.example.com:5000 user@personal.server.com -N

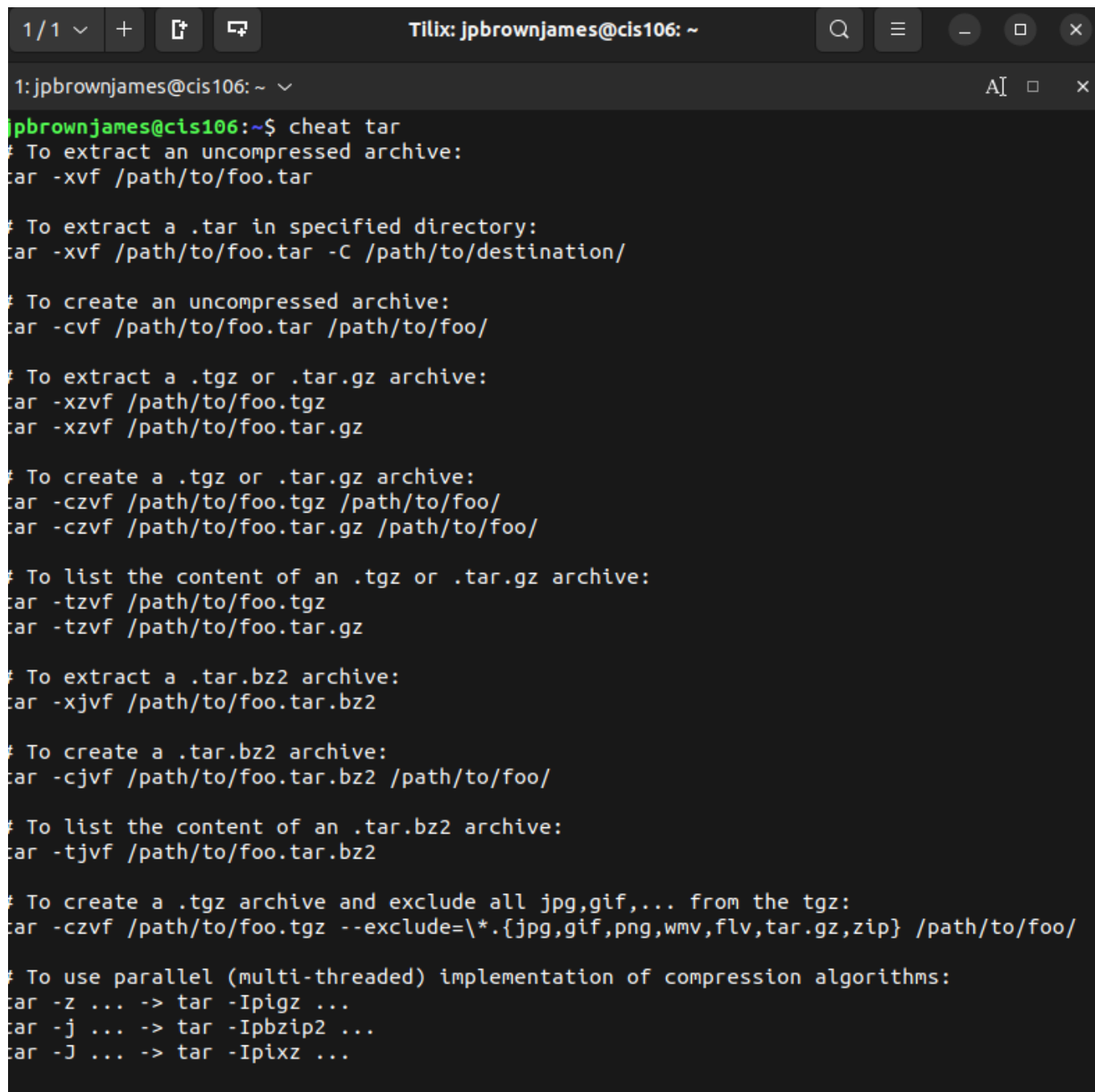
# To launch a specific x application over SSH:
ssh -X -t <user>@<host> 'chromium-browser'

# To create a SOCKS proxy on localhost and <port>:
ssh -qND <port> <user>@<host>

# To tunnel an ssh session over the SOCKS proxy on localhost and port 9999:
ssh -o "ProxyCommand nc -x 127.0.0.1:9999 -X 4 %h %p" <user>@<host>

# -X use an xsession, -C compress data, "-c blowfish" use the encryption blowfish:
ssh <user>@<host> -C -c blowfish -X

# For more information, see:
# http://unix.stackexchange.com/q/12755/44856
```

A terminal window titled 'Tilix: jpbrownjames@cis106: ~' with standard window controls. The terminal shows a user prompt 'jpbrownjames@cis106:~\$' followed by the command 'cheat tar'. The output is a list of tar command examples categorized by their purpose: extracting uncompressed archives, extracting to a directory, creating uncompressed archives, extracting compressed archives (tgz, tar.gz), creating compressed archives, listing contents of compressed archives, extracting tar.bz2 archives, creating tar.bz2 archives, listing contents of tar.bz2 archives, creating a tar.gz archive with exclusions, and using parallel compression algorithms.

```
1/1  +  [icon] [icon]  Tilix: jpbrownjames@cis106: ~  [search] [menu] [zoom out] [zoom in] [close]

1: jpbrownjames@cis106: ~  AI [icon] [close]

jpbrownjames@cis106:~$ cheat tar
# To extract an uncompressed archive:
tar -xvf /path/to/foo.tar

# To extract a .tar in specified directory:
tar -xvf /path/to/foo.tar -C /path/to/destination/

# To create an uncompressed archive:
tar -cvf /path/to/foo.tar /path/to/foo/

# To extract a .tgz or .tar.gz archive:
tar -xzvf /path/to/foo.tgz
tar -xzvf /path/to/foo.tar.gz

# To create a .tgz or .tar.gz archive:
tar -czvf /path/to/foo.tgz /path/to/foo/
tar -czvf /path/to/foo.tar.gz /path/to/foo/

# To list the content of an .tgz or .tar.gz archive:
tar -tzvf /path/to/foo.tgz
tar -tzvf /path/to/foo.tar.gz

# To extract a .tar.bz2 archive:
tar -xjvf /path/to/foo.tar.bz2

# To create a .tar.bz2 archive:
tar -cjvf /path/to/foo.tar.bz2 /path/to/foo/

# To list the content of an .tar.bz2 archive:
tar -tjvf /path/to/foo.tar.bz2

# To create a .tgz archive and exclude all jpg,gif,... from the tgz:
tar -czvf /path/to/foo.tgz --exclude=*. {jpg,gif,png,wmv,flv,tar.gz,zip} /path/to/foo/

# To use parallel (multi-threaded) implementation of compression algorithms:
tar -z ... -> tar -Ipigz ...
tar -j ... -> tar -Ipbzip2 ...
tar -J ... -> tar -Ipixz ...
```

```
1/1 ▾ + [🔍] [📄] T

1:jpbrownjames@cis106: ~ ▾

jpbrownjames@cis106:~$ sudo apt install python3-pip
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
python3-pip is already the newest version (22.0.2+dfsg-1ubuntu0.4).
The following packages were automatically installed and are no longer required:
  apport-symptoms guile-2.2-libs libgnome-games-support-1-3
  libgnome-games-support-common libqqwing2v5 python3-systemd
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 34 not upgraded.
jpbrownjames@cis106:~$ cheat tar | pygmentize
To extract an uncompressed archive:
tar -xvf /path/to/foo.tar

To extract a .tar in specified directory:
tar -xvf /path/to/foo.tar -C /path/to/destination/

To create an uncompressed archive:
tar -cvf /path/to/foo.tar /path/to/foo/

To extract a .tgz or .tar.gz archive:
tar -xzvf /path/to/foo.tgz
tar -xzvf /path/to/foo.tar.gz

To create a .tgz or .tar.gz archive:
tar -czvf /path/to/foo.tgz /path/to/foo/
tar -czvf /path/to/foo.tar.gz /path/to/foo/

To list the content of an .tgz or .tar.gz archive:
tar -tzvf /path/to/foo.tgz
tar -tzvf /path/to/foo.tar.gz

To extract a .tar.bz2 archive:
tar -xjvf /path/to/foo.tar.bz2

To create a .tar.bz2 archive:
tar -cjvf /path/to/foo.tar.bz2 /path/to/foo/

To list the content of an .tar.bz2 archive:
tar -tjvf /path/to/foo.tar.bz2

To create a .tgz archive and exclude all jpg,gif,... from the tgz:
tar -czvf /path/to/foo.tgz --exclude=\*.{jpg,gif,png,wmv,flv,tar.gz,zip} /path/to/foo/

To use parallel (multi-threaded) implementation of compression algorithms:
tar -z ... -> tar -Ipigz ...
```

Practice 1: Managing Software

```
1/1 ~ + [T] [C] Tilix jpbrownjames@cis106: ~  
1:jpbrownjames@cis106:~$ sudo apt install bastet -y  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  apport-symptoms guile-2.2-libs libgnome-games-support-1-3 libgnome-games-support-common  
  libgwing2v5 python3-systemd  
Use 'sudo apt autoremove' to remove them.  
The following additional packages will be installed:  
  libboost-program-options1.74.0  
The following NEW packages will be installed:  
  bastet libboost-program-options1.74.0  
0 upgraded, 2 newly installed, 0 to remove and 34 not upgraded.  
Need to get 388 kB of archives.  
After this operation, 2,585 kB of additional disk space will be used.  
Get1 http://us.archive.ubuntu.com/ubuntu jammy/main amd64 libboost-program-options1.74.0 amd64 1.74.0-14ubuntu3 [311 kB]  
Get2 http://us.archive.ubuntu.com/ubuntu jammy/universe amd64 bastet amd64 0.43-7 [76.9 kB]  
Fetched 388 kB in 1s (462 kB/s)  
Preconfiguring packages ...  
Selecting previously unselected package libboost-program-options1.74.0:amd64.  
(Reading database ... 231352 files and directories currently installed.)  
Preparing to unpack .../libboost-program-options1.74.0-1.74.0-14ubuntu3_amd64.deb ...  
Unpacking libboost-program-options1.74.0:amd64 (1.74.0-14ubuntu3) ...  
Selecting previously unselected package bastet.  
Preparing to unpack .../bastet_0.43-7_amd64.deb ...  
Unpacking bastet (0.43-7) ...  
Setting up libboost-program-options1.74.0:amd64 (1.74.0-14ubuntu3) ...  
Setting up bastet (0.43-7) ...  
Processing triggers for mailcap (3.70+nmuiubuntu1) ...  
Processing triggers for bamfdaemon (0.5.6+22.04.20220217-0ubuntu1) ...  
Rebuilding /usr/share/applications/bamf-2.index ...  
Processing triggers for desktop-file-utils (0.26-1ubuntu3) ...  
Processing triggers for hicolor-icon-theme (0.17-2) ...  
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...  
Processing triggers for libc-bin (2.35-0ubuntu3.6) ...  
Processing triggers for man-db (2.10.2-1) ...  
jpbrownjames@cis106:~$ bastet  
jpbrownjames@cis106:~$ sudo apt remove bastet  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  apport-symptoms guile-2.2-libs libboost-program-options1.74.0 libgnome-games-support-1-3  
  libgnome-games-support-common libgwing2v5 python3-systemd  
Use 'sudo apt autoremove' to remove them.  
The following packages will be REMOVED:  
  bastet  
0 upgraded, 0 newly installed, 1 to remove and 34 not upgraded.  
After this operation, 212 kB disk space will be freed.  
Do you want to continue? [Y/n] y  
(Reading database ... 231369 files and directories currently installed.)  
Removing bastet (0.43-7) ...  
Processing triggers for desktop-file-utils (0.26-1ubuntu3) ...  
Processing triggers for hicolor-icon-theme (0.17-2) ...  
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...  
Processing triggers for man-db (2.10.2-1) ...  
Processing triggers for mailcap (3.70+nmuiubuntu1) ...  
Processing triggers for bamfdaemon (0.5.6+22.04.20220217-0ubuntu1) ...  
Rebuilding /usr/share/applications/bamf-2.index ...  
sudjpbrownjames@cis106:~$ sudo apt purge bastet  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  apport-symptoms guile-2.2-libs libboost-program-options1.74.0 libgnome-games-support-1-3  
  libgnome-games-support-common libgwing2v5 python3-systemd  
Use 'sudo apt autoremove' to remove them.  
The following packages will be REMOVED:  
  bastet*  
0 upgraded, 0 newly installed, 1 to remove and 34 not upgraded.  
After this operation, 0 B of additional disk space will be used.  
Do you want to continue? [Y/n] y  
(Reading database ... 231359 files and directories currently installed.)  
Purging configuration files for bastet (0.43-7) ...  
jpbrownjames@cis106:~$
```

```
2:jpbrownjames@cis106:~$ apt search "tetris clone"  
Sorting... Done  
Full Text Search... Done  
bastet/jammy 0.43-7 amd64  
  ncurses Tetris clone with a bastard algorithm  
  
ltris/jammy 1.0.19-3build1 amd64  
  very polished Tetris clone with CPU opponents  
  
tint/jammy 0.07 amd64  
  Tetris clone for text based terminal  
  
jpbrownjames@cis106:~$ man bastet  
jpbrownjames@cis106:~$
```

Practice 2: Install a deb file via CLI

```

1/1  +  [ ]  [ ]  Tilix: jpbrownjames@cis106: ~
jpbrownjames@cis106: ~
jpbrownjames@cis106:~$ sudo apt install ./Downloads/code_1.86.2-1707854558_amd64.deb
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Note, selecting 'code' instead of './Downloads/code_1.86.2-1707854558_amd64.deb'
The following packages were automatically installed and are no longer required:
  apport-symptoms guile-2.2-libc libboost-program-options1.74.0
  libgnome-games-support-1-3 libgnome-games-support-common libqqwing2v5
  python3-systemd
Use 'sudo apt autoremove' to remove them.
The following packages will be upgraded:
  code
1 upgraded, 0 newly installed, 0 to remove and 33 not upgraded.
Need to get 0 B/99.8 MB of archives.
After this operation, 1,024 B of additional disk space will be used.
(Reading database ... 231358 files and directories currently installed.)
Preparing to unpack .../code_1.86.2-1707854558_amd64.deb ...
Unpacking code (1.86.2-1707854558) over (1.86.1-1707298119) ...
Setting up code (1.86.2-1707854558) ...
Processing triggers for desktop-file-utils (0.26-1ubuntu3) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for shared-mime-info (2.1-2) ...
Processing triggers for mailcap (3.70+nmu1ubuntu1) ...
Processing triggers for bamfdaemon (0.5.6+22.04.20220217-0ubuntu1) ...
Rebuilding /usr/share/applications/bamf-2.index...
jpbrownjames@cis106:~$

```

Practice 3: Installing and removing snaps

```

1/1  +  [ ]  [ ]  Tilix: jpbrownjames@cis106: ~
jpbrownjames@cis106: ~
jpbrownjames@cis106:~$ sudo snap install tetriz-in-racket
tetriz-in-racket 1.2-2 from Bruno Nova (brunonova) installed
jpbrownjames@cis106:~$ sudo snap remove tetriz-in-racket
tetriz-in-racket removed
jpbrownjames@cis106:~$

```

```

Fontconfig warning: "/etc/fonts/conf.d/65-fonts-persian.conf", line 34: unknown element "its:rules"
Fontconfig warning: "/etc/fonts/conf.d/65-fonts-persian.conf", line 35: unknown element "its:translateRule"
Fontconfig error: "/etc/fonts/conf.d/65-fonts-persian.conf", line 35: invalid attribute 'translate'
Fontconfig error: "/etc/fonts/conf.d/65-fonts-persian.conf", line 35: invalid attribute 'selector'
Fontconfig error: "/etc/fonts/conf.d/65-fonts-persian.conf", line 36: invalid attribute 'xmlns:its'
Fontconfig error: "/etc/fonts/conf.d/65-fonts-persian.conf", line 36: invalid attribute 'version'
Fontconfig warning: "/etc/fonts/conf.d/65-nonlatin.conf", line 4: unknown element "its:rules"
Fontconfig warning: "/etc/fonts/conf.d/65-nonlatin.conf", line 5: unknown element "its:translateRule"
Fontconfig error: "/etc/fonts/conf.d/65-nonlatin.conf", line 5: invalid attribute 'translate'
Fontconfig error: "/etc/fonts/conf.d/65-nonlatin.conf", line 5: invalid attribute 'selector'
Fontconfig error: "/etc/fonts/conf.d/65-nonlatin.conf", line 6: invalid attribute 'xmlns:its'
Fontconfig error: "/etc/fonts/conf.d/65-nonlatin.conf", line 6: invalid attribute 'version'
Fontconfig warning: "/etc/fonts/conf.d/65-nonlatin.conf", line 8: unknown element "description"
Fontconfig warning: "/etc/fonts/conf.d/69-unifont.conf", line 4: unknown element "its:rules"
Fontconfig error: "/etc/fonts/conf.d/69-unifont.conf", line 5: invalid attribute "its:translateRule"
Fontconfig error: "/etc/fonts/conf.d/69-unifont.conf", line 5: invalid attribute 'selector'
Fontconfig error: "/etc/fonts/conf.d/69-unifont.conf", line 6: invalid attribute 'xmlns:its'
Fontconfig error: "/etc/fonts/conf.d/69-unifont.conf", line 6: invalid attribute 'version'
Fontconfig warning: "/etc/fonts/conf.d/70-no-bitmaps.conf", line 4: unknown element "its:rules"
Fontconfig warning: "/etc/fonts/conf.d/70-no-bitmaps.conf", line 5: unknown element "its:translateRule"
Fontconfig error: "/etc/fonts/conf.d/70-no-bitmaps.conf", line 5: invalid attribute 'translate'
Fontconfig error: "/etc/fonts/conf.d/70-no-bitmaps.conf", line 6: invalid attribute 'selector'
Fontconfig error: "/etc/fonts/conf.d/70-no-bitmaps.conf", line 6: invalid attribute 'xmlns:its'
Fontconfig error: "/etc/fonts/conf.d/70-no-bitmaps.conf", line 6: invalid attribute 'version'
Fontconfig warning: "/etc/fonts/conf.d/70-no-bitmaps.conf", line 8: unknown element "description"
Fontconfig warning: "/etc/fonts/conf.d/80-delicious.conf", line 4: unknown element "its:rules"
Fontconfig error: "/etc/fonts/conf.d/80-delicious.conf", line 5: invalid attribute "its:translateRule"
Fontconfig error: "/etc/fonts/conf.d/80-delicious.conf", line 5: invalid attribute 'translate'
Fontconfig error: "/etc/fonts/conf.d/80-delicious.conf", line 5: invalid attribute 'selector'
Fontconfig error: "/etc/fonts/conf.d/80-delicious.conf", line 6: invalid attribute 'xmlns:its'
Fontconfig error: "/etc/fonts/conf.d/80-delicious.conf", line 6: invalid attribute 'version'
Fontconfig warning: "/etc/fonts/conf.d/90-synthetic.conf", line 4: unknown element "its:rules"
Fontconfig warning: "/etc/fonts/conf.d/90-synthetic.conf", line 5: unknown element "its:translateRule"
Fontconfig error: "/etc/fonts/conf.d/90-synthetic.conf", line 5: invalid attribute 'translate'
Fontconfig error: "/etc/fonts/conf.d/90-synthetic.conf", line 5: invalid attribute 'selector'
Fontconfig error: "/etc/fonts/conf.d/90-synthetic.conf", line 6: invalid attribute 'xmlns:its'
Fontconfig error: "/etc/fonts/conf.d/90-synthetic.conf", line 6: invalid attribute 'version'
sh_m_open() failed: Permission denied
Connection failure: Connection refused
pe_context.connect() failed: Connection refused
jpbrownjames@cis106:~$ man tetriz-in-racket
No manual entry for tetriz-in-racket
jpbrownjames@cis106:~$

```