

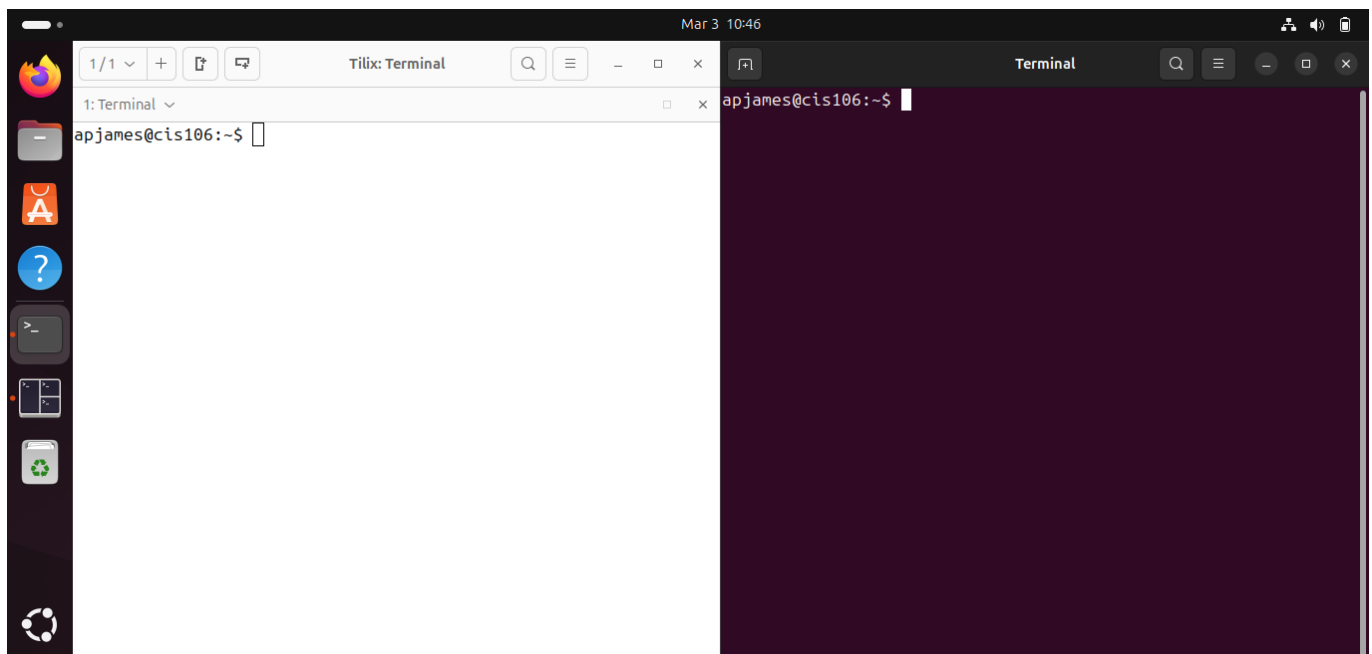
Week Report 3

Completed work for week 3

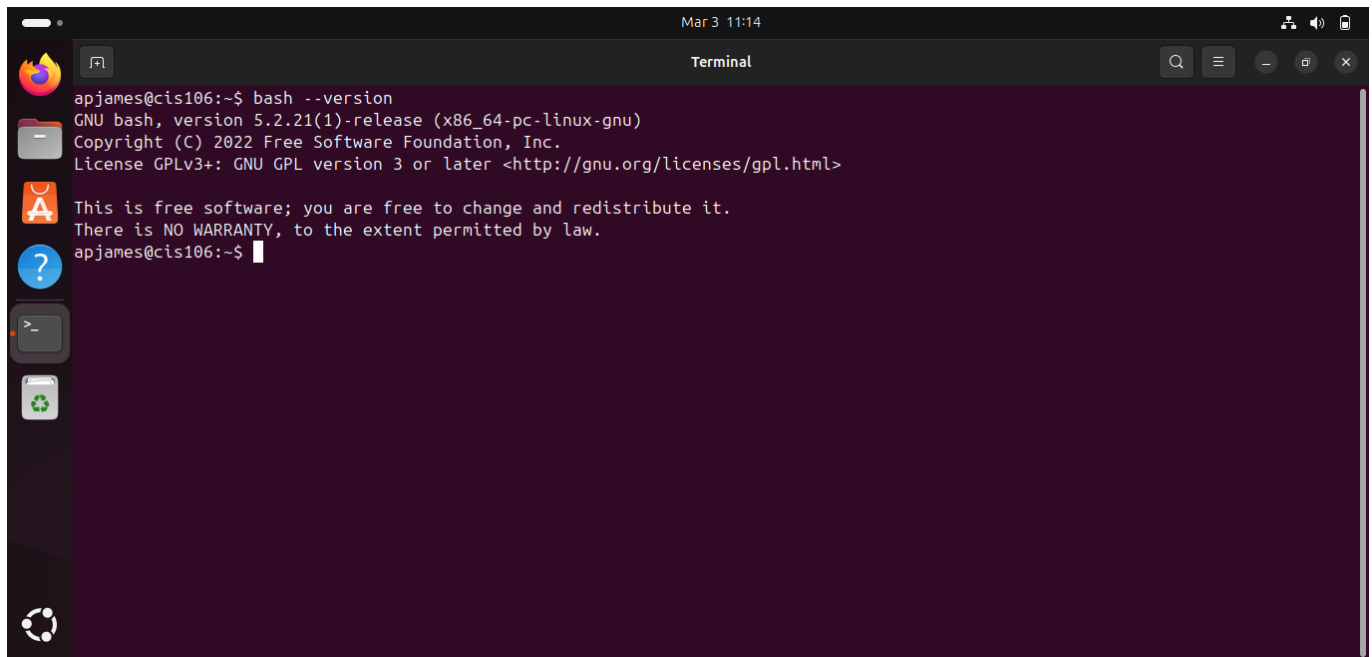
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Practice

Practice 1



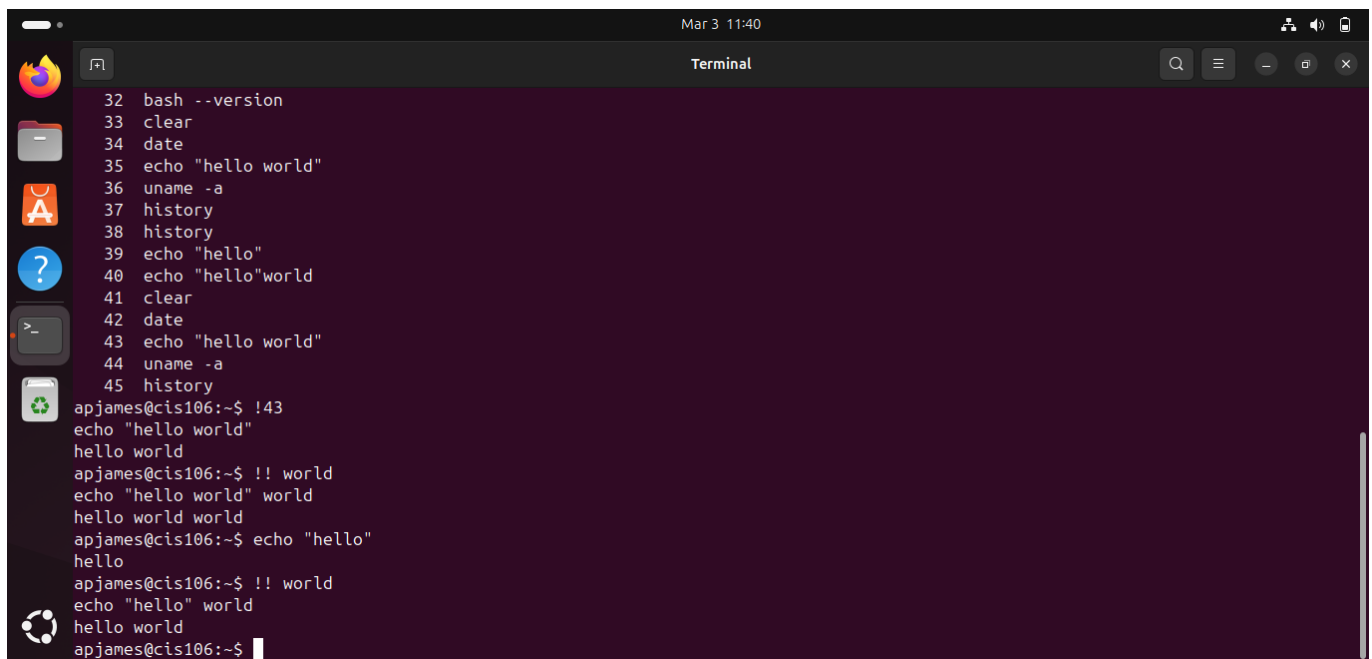
Practice 2

A terminal window titled "Terminal" with a dark background. The prompt is "apjames@cis106:~\$". The user has entered "bash --version", and the output is displayed. The window has a standard Ubuntu-style top bar with the date "Mar 3 11:14" and system icons. On the left, there is a vertical dock with icons for Firefox, Files, Applications, Help, Dash, and Recycle Bin.

```
apjames@cis106:~$ bash --version
GNU bash, version 5.2.21(1)-release (x86_64-pc-linux-gnu)
Copyright (C) 2022 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.
apjames@cis106:~$
```

Practice 3

A terminal window titled "Terminal" with a dark background. The prompt is "apjames@cis106:~\$". The user has entered a series of commands, which are listed on the left side of the terminal. The output of each command is shown to the right of the command. The window has a standard Ubuntu-style top bar with the date "Mar 3 11:40" and system icons. On the left, there is a vertical dock with icons for Firefox, Files, Applications, Help, Dash, and Recycle Bin.

```
32 bash --version
33 clear
34 date
35 echo "hello world"
36 uname -a
37 history
38 history
39 echo "hello"
40 echo "hello"world
41 clear
42 date
43 echo "hello world"
44 uname -a
45 history
apjames@cis106:~$ !43
echo "hello world"
hello world
apjames@cis106:~$ !! world
echo "hello world" world
hello world world
apjames@cis106:~$ echo "hello"
hello
apjames@cis106:~$ !! world
echo "hello" world
hello world
apjames@cis106:~$
```

Practice 4

Mar 3 11:53

Terminal

```
apjames@cis106:~$ bash ~/Scripts/hello.sh
Today's date is:
Mon Mar 3 11:53:32 AM EST 2025
-----
this is your memory info:
      total      used      free      shared  buff/cache   available
Mem:    4.8Gi    1.8Gi    2.0Gi        57Mi    1.3Gi    3.0Gi
Swap:   4.0Gi         0B    4.0Gi
This is your disk utilization
Filesystem      Size  Used Avail Use% Mounted on
/dev/sda2       25G   13G   11G   56% /
/home/apjames/Scripts/hello.sh: line 9: ecgo: command not found
Linux cis106 6.11.0-17-generic #17~24.04.2-Ubuntu SMP PREEMPT_DYNAMIC Mon Jan 20 22:48:29 UTC 2 x86_64 x86_64 x86_64 GNU/Linux
and this is your ip
10.0.2.15 fd00::65e1:7bdd:93df:e87d fd00::a00:27ff:fe4c:81cb
apjames@cis106:~$
```

Practice 5

Mar 3 12:50

Tilix: Terminal

1: Terminal

2: Terminal

```
1: Terminal
apjames@cis106:~$ uname -s
Linux
apjames@cis106:~$ uname -n
cis106
apjames@cis106:~$ uname -io
x86_64 GNU/Linux
apjames@cis106:~$ man date
apjames@cis106:~$ man df
apjames@cis106:~$ man free
apjames@cis106:~$ man clear
apjames@cis106:~$ man history
apjames@cis106:~$ free --giga
      total      used      free      shared  buff/c
ache  available
Mem:    5          2          1          0
1          3
Swap:   4          0          4
apjames@cis106:~$

2: Terminal
apjames@cis106:~$ man uname
apjames@cis106:~$ man history
apjames@cis106:~$
```

Practice 6

```

Mar 3 13:08
Tilix: Terminal
1/1 v + [icons]
1: Terminal v [icons]
apjames@cis106:~$ whatis ls
ls (1) - list directory contents
apjames@cis106:~$ whatis pwd
pwd (1) - print name of current/working directory
apjames@cis106:~$ whatis apt
apt (8) - command-line interface
apjames@cis106:~$ whatis sudo
sudo (8) - execute a command as another user
apjames@cis106:~$

```

Practice 7

```

Mar 3 13:24
Tilix: Terminal
1: Terminal v [icons] 2: Terminal v [icons]

To list all cheatsheets whose titles match "apt":
cheat -l apt

To list all tags in use:
cheat -T

To list available cheatsheets that are tagged as "personal":
cheat -l -t personal

To search for "ssh" among all cheatsheets, and colorize matches:
cheat -c -s ssh

To search (by regex) for cheatsheets that contain an IP address:
cheat -c -r -s '(?:[0-9]{1,3}\.){3}[0-9]{1,3}'

To remove (delete) the foo/bar cheatsheet:
cheat --rm foo/bar

To view the configuration file path:
cheat --conf
apjames@cis106:~$

# 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

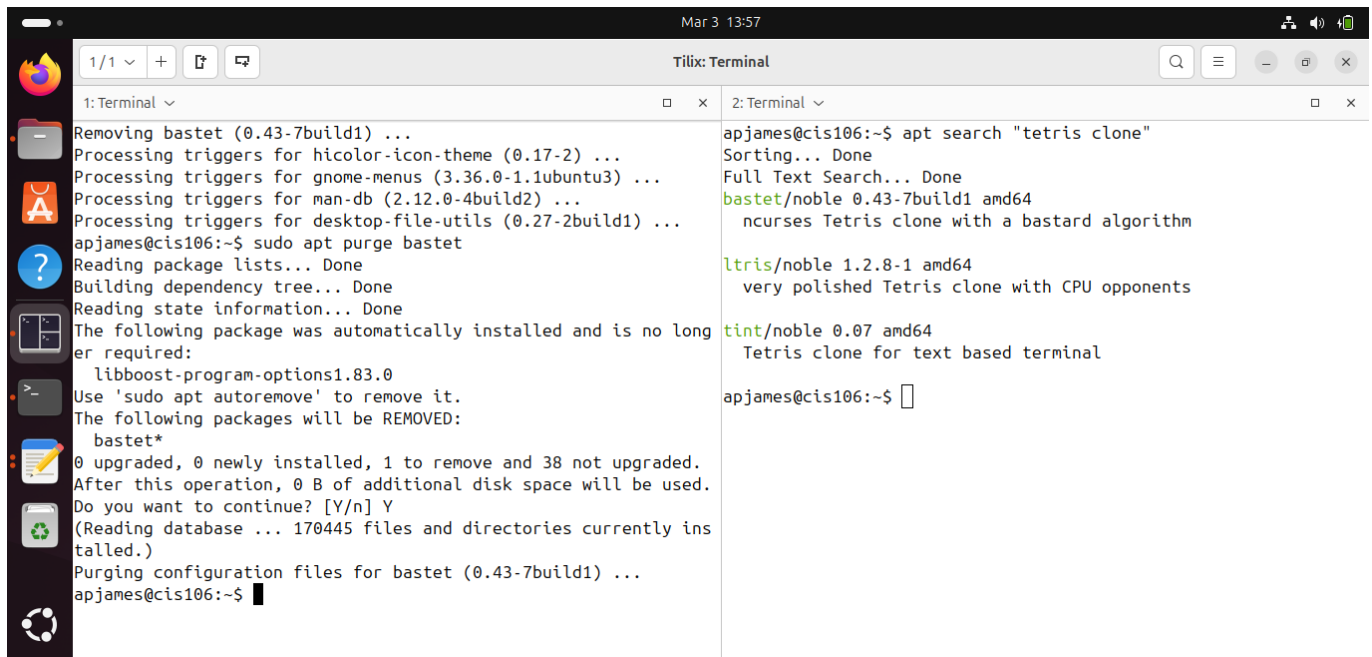
# To create a .tgz archive and exclude all jpg,gif,... from the
tgz:
tar -czvf /path/to/foo.tgz --exclude=*.{jpg,gif,png,wmv,flv,tar,gz,zip} /path/to/foo/

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

# To append a new file to an old tar archive:
tar -rf <archive.tar> <new-file-to-append>
apjames@cis106:~$

```

Practice 1 Managing Software



The screenshot shows a terminal window with two panes. The left pane shows the process of removing the `bastet` package. The right pane shows the results of an `apt search "tetris clone"` command.

```
1: Terminal v
Removing bastet (0.43-7build1) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for desktop-file-utils (0.27-2build1) ...
apjames@cis106:~$ sudo apt purge bastet
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
  libboost-program-options1.83.0
Use 'sudo apt autoremove' to remove it.
The following packages will be REMOVED:
  bastet*
0 upgraded, 0 newly installed, 1 to remove and 38 not upgraded.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n] Y
(Reading database ... 170445 files and directories currently installed.)
Purging configuration files for bastet (0.43-7build1) ...
apjames@cis106:~$

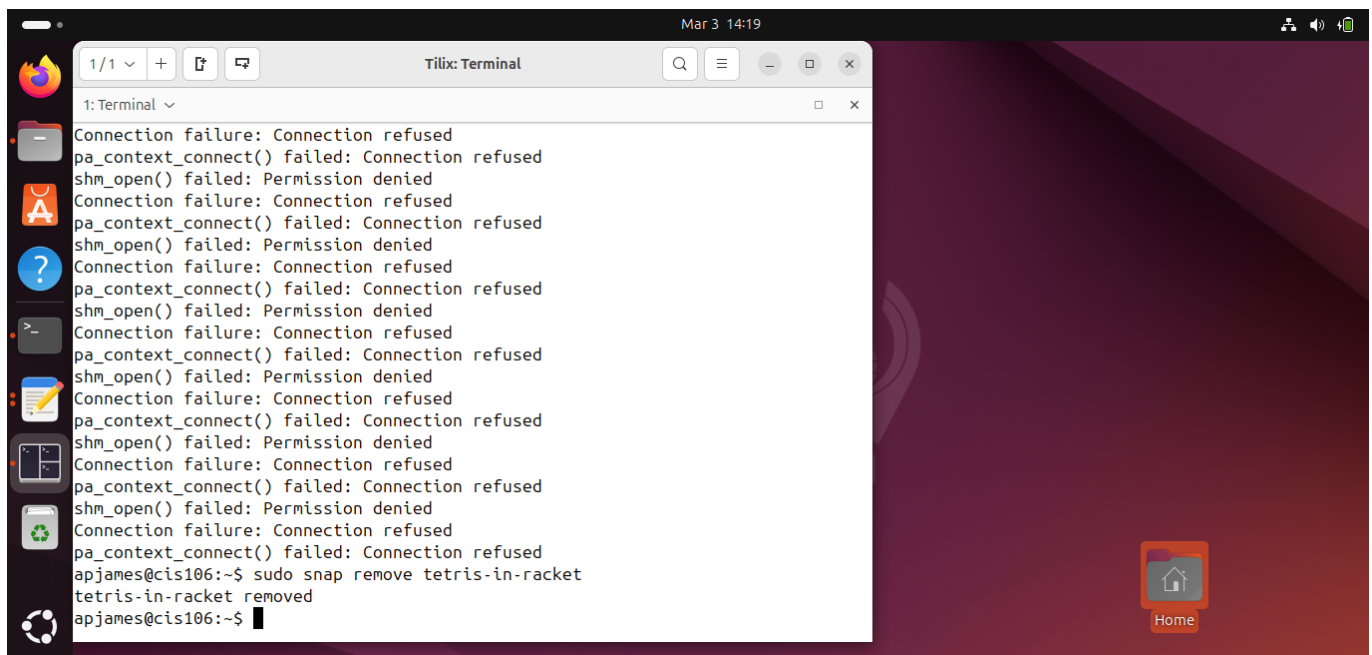
2: Terminal v
apjames@cis106:~$ apt search "tetris clone"
Sorting... Done
Full Text Search... Done
bastet/noble 0.43-7build1 amd64
  ncurses Tetris clone with a bastard algorithm

ltris/noble 1.2.8-1 amd64
  very polished Tetris clone with CPU opponents

tint/noble 0.07 amd64
  Tetris clone for text based terminal

apjames@cis106:~$
```

Practice 3 Managing Software



The screenshot shows a terminal window with a single pane. The output shows multiple connection failures followed by the successful removal of the `tetris-in-racket` snap package.

```
1: Terminal v
Connection failure: Connection refused
pa_context_connect() failed: Connection refused
shm_open() failed: Permission denied
Connection failure: Connection refused
pa_context_connect() failed: Connection refused
shm_open() failed: Permission denied
Connection failure: Connection refused
pa_context_connect() failed: Connection refused
shm_open() failed: Permission denied
Connection failure: Connection refused
pa_context_connect() failed: Connection refused
shm_open() failed: Permission denied
Connection failure: Connection refused
pa_context_connect() failed: Connection refused
shm_open() failed: Permission denied
Connection failure: Connection refused
pa_context_connect() failed: Connection refused
shm_open() failed: Permission denied
apjames@cis106:~$ sudo snap remove tetris-in-racket
tetris-in-racket removed
apjames@cis106:~$
```