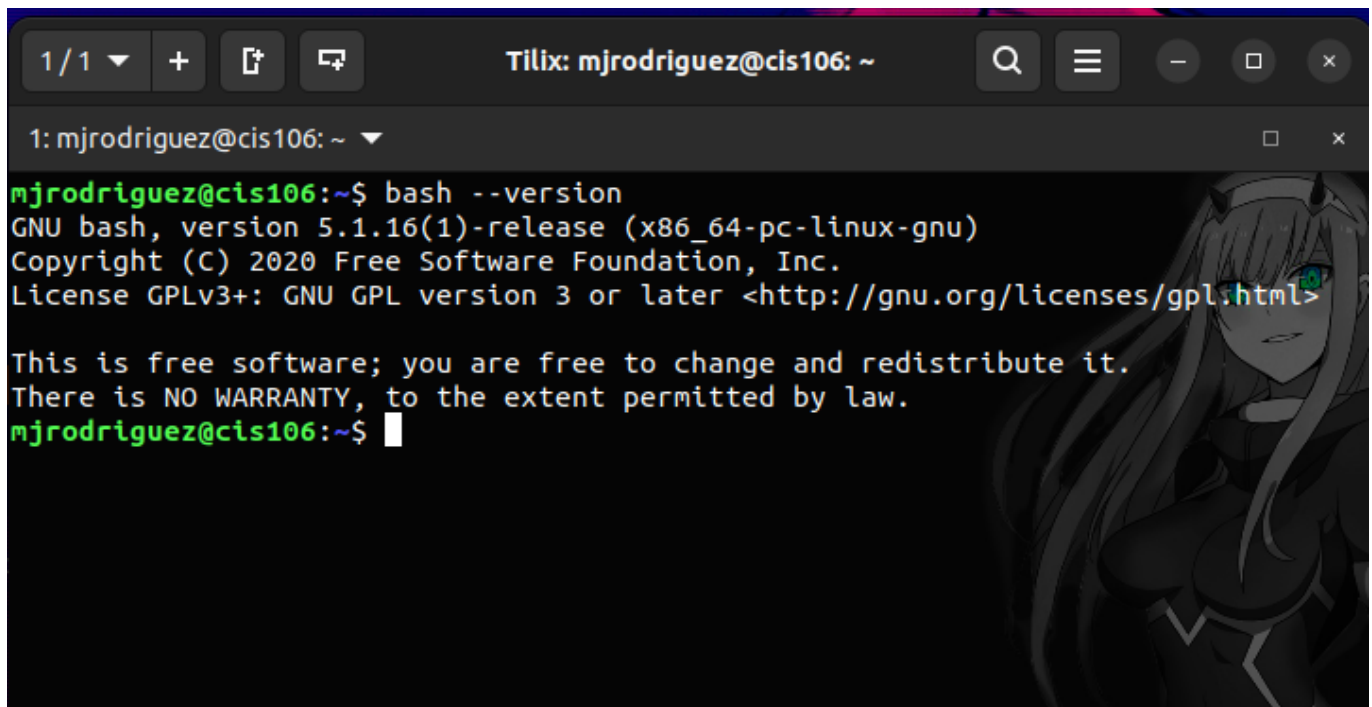


Week Report 3

Completed work for week 3

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

Practice 2: Accessing the bash Shell




```
Tmux: mjrodriguez@cis106: ~  
1: mjrodriguez@cis106: ~  
mjrodriguez@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.  
mjrodriguez@cis106:~$
```

Practice 3: Using the command history

1 / 1 + [Tilix: mjrodriguez@cis106: ~]

1: mjrodriguez@cis106: ~

```
99 man date
100 man echo
101 git pull
102 git add .
103 git commit -m "notes 1 finished"
104 git push
105 bash --version
106 clear
107 date
108 echo "hello world"
109 uname -a
110 history
mjrodriguez@cis106:~$ !108
echo "hello world"
hello world
mjrodriguez@cis106:~$ !!
echo "hello world"
hello world
mjrodriguez@cis106:~$ echo "hello"
hello
mjrodriguez@cis106:~$ !!world
echo "hello"world
helloworld
mjrodriguez@cis106:~$
```




Practice 4: My First Shell Script

1 / 1 + [Tilix: mjrodriguez@cis106: ~]

1: mjrodriguez@cis106: ~

```
mjrodriguez@cis106:~$ bash ~/scripts/hello.sh
hello world
I am learning linux
this is my first shell script
mjrodriguez@cis106:~$
```



Practice 5: Using man

```
mjrodriguez@cis106:~$ uname -s
Linux
mjrodriguez@cis106:~$ uname -n
mjrodriguez@cis106:~$ uname -n
uname-n: command not found
mjrodriguez@cis106:~$ uname -lo
x86_64 GNU/Linux
mjrodriguez@cis106:~$ uname -s
Linux
mjrodriguez@cis106:~$ uname -n
Linux
mjrodriguez@cis106:~$ uname -n
cis106
mjrodriguez@cis106:~$ uname -lo
uname: invalid option -- 'o'
Try 'uname --help' for more information.
mjrodriguez@cis106:~$ uname -lo
x86_64 GNU/Linux
mjrodriguez@cis106:~$ man date
mjrodriguez@cis106:~$ man df
mjrodriguez@cis106:~$ man free
mjrodriguez@cis106:~$ man clear
mjrodriguez@cis106:~$ man history
mjrodriguez@cis106:~$ free --giga
total        used        free      shared  buff/cache   available
Mem:           2            1            0           0           0
Swap:           4            0            3
```

```
UNAME(1)  User Commands  UNAME(1)
NAME
    uname - print system information
SYNOPSIS
    uname [OPTION]...
DESCRIPTION
    Print certain system information.  With no OPTION, same as -s.
    -a, --all
        print all information, in the following order, except omit -p and -i if unknown:
    -s, --kernel-name
        print the kernel name
    -n, --nodename
        print the network node hostname
```



Practice 6: Using help

```

Tilix: mjrodriguez@cis106: ~

1: mjrodriguez@cis106: ~
mjrodriguez@cis106:~$ free --help
Usage:
  free [options]

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

2: mjrodriguez@cis106: ~
mjrodriguez@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 value
  -s, --warnings[=WARNINGS] enable warnings from groff

Main modes of operation:
  -f, --whatls            equivalent to whatls
  -k, --apropos           equivalent to apropos
  -K, --global-apropos    search for text in all pages
  -l, --local-file        interpret PAGE argument(s) as local file
  -W, --where, --path, --location print physical location of man page(s)
  -W, --where-cat, --location-cat print physical location of cat file(s)
  -C, --catman            used by catman to reformat out of date c
  at pages

3: mjrodriguez@cis106: ~
mjrodriguez@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 t
oo.
  -d, --date=STRING       display time described by STRING, not 'n
ow'
  --debug                annotate the parsed date,
                        and warn about questionable usage to st
derr
  -f, --file=DATEFILE     like --date; once for each line of DATEF
ILE
  -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 pre
cision.
  -C, --catman            output date and time in RFC 5322 format.
                        Example: 2006-08-14T02:34:56-06:00
  -R, --rfc-email         output date and time in RFC 5322 format.
                        Example: Wed, 14 Aug 2006 02:34:56 -0600

```

Practice 7: Using cheat

```

Tilix: mjrodriguez@cis106: ~

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

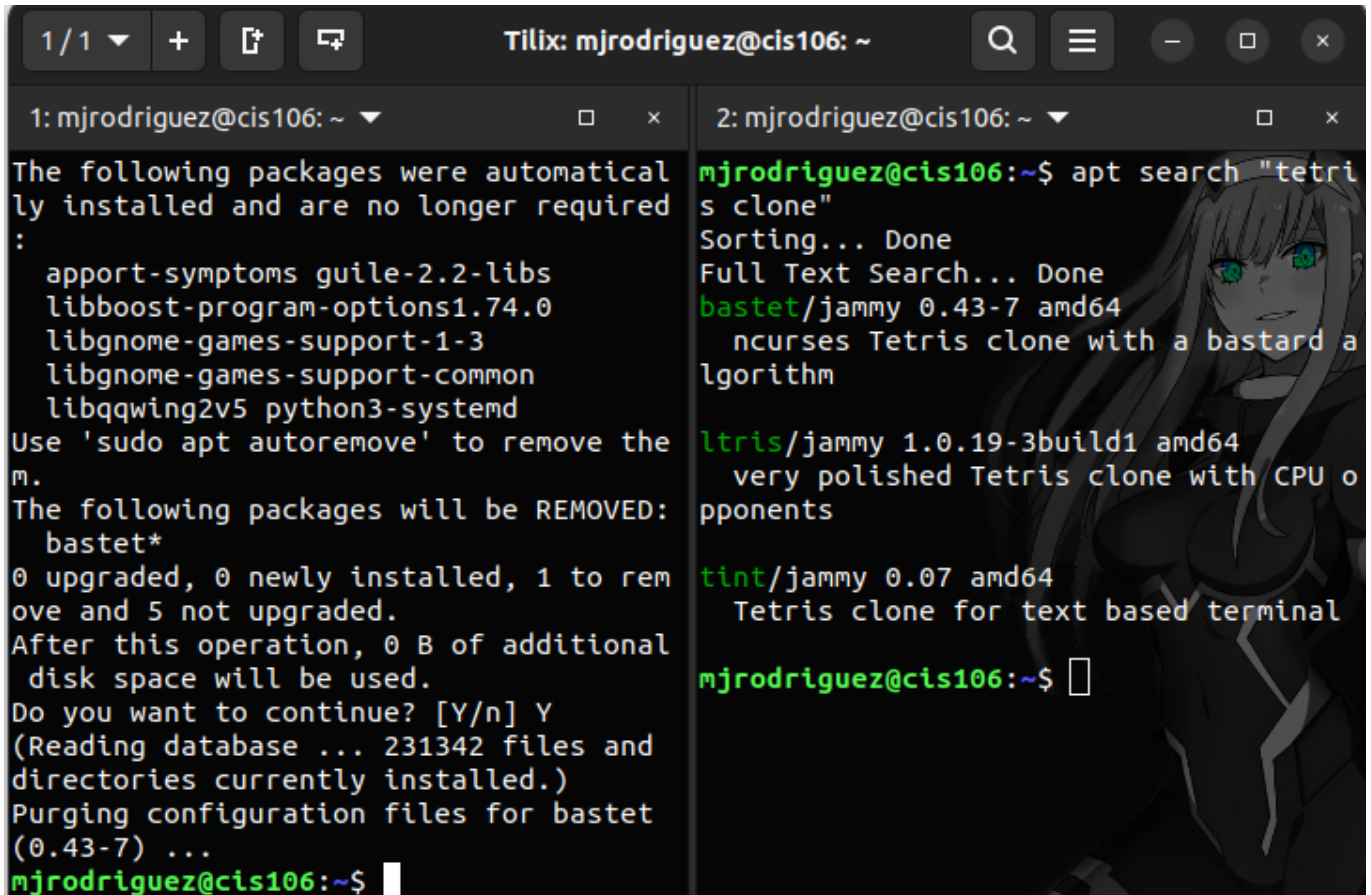
# To create a .tgz archive and exclude all jpg,gif,... from the tgz:
tar -czvf /path/to/foo.tgz --exclude=\*.{jpg,gif,png,wmv,flv,tar.gz,zip} /path/t
o/foo/

# 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>
mjrodriguez@cis106:~$

```

Practice 1: Managing Software



```

1: mjrodriguez@cis106: ~
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 libqqwing2v5 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 5 not upgraded.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n] Y
(Reading database ... 231342 files and directories currently installed.)
Purging configuration files for bastet (0.43-7) ...
mjrodriguez@cis106:~$

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

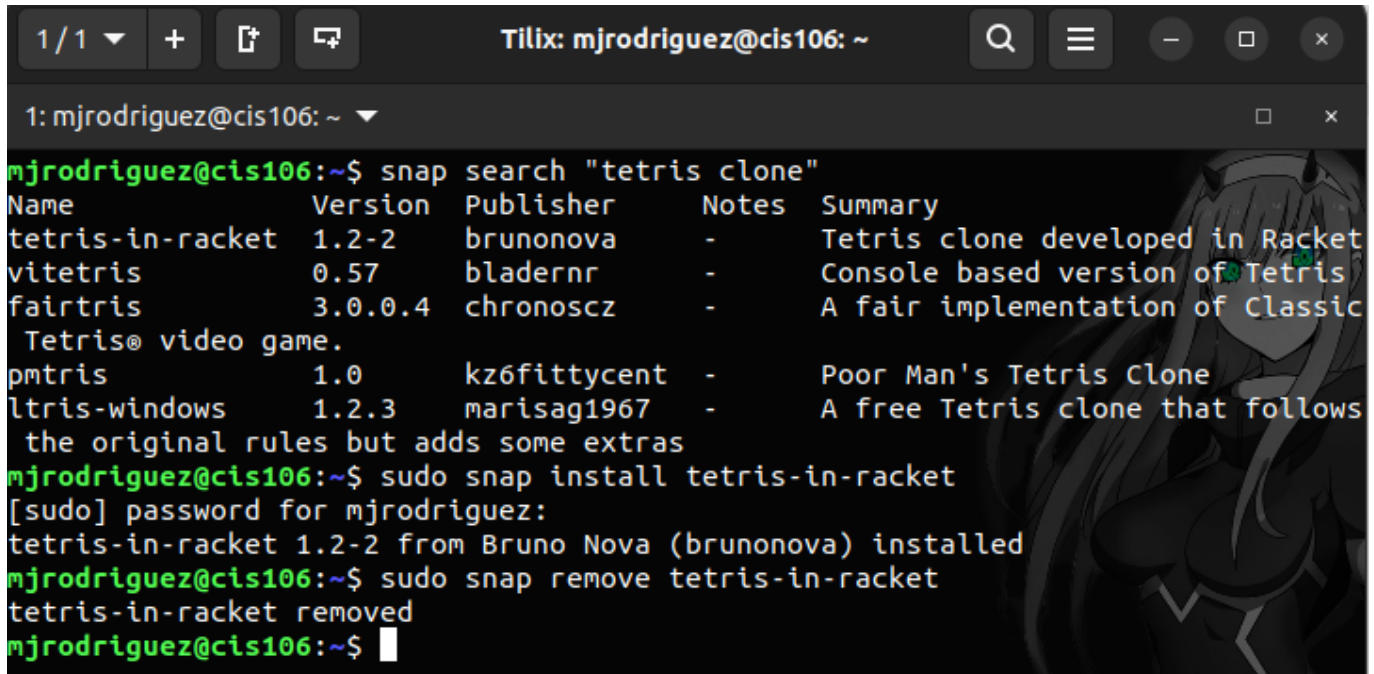
ltris/jammy 1.0.19-3build1 amd64
  very polished Tetris clone with CPU opponents

tint/jammy 0.07 amd64
  Tetris clone for text based terminal

mjrodriguez@cis106:~$

```

Practice 3: Installing and removing snaps



```

1: mjrodriguez@cis106: ~
mjrodriguez@cis106:~$ snap search "tetris clone"
Name            Version  Publisher  Notes  Summary
tetris-in-racket 1.2-2    brunonova  -      Tetris clone developed in Racket
vitetris         0.57     bladernr   -      Console based version of Tetris
fairtris        3.0.0.4  chronoscz  -      A fair implementation of Classic Tetris® video game.
pmtris          1.0      kz6fittycent -      Poor Man's Tetris Clone
ltris-windows   1.2.3    marisag1967 -      A free Tetris clone that follows the original rules but adds some extras
mjrodriguez@cis106:~$ sudo snap install tetris-in-racket
[sudo] password for mjrodriguez:
tetris-in-racket 1.2-2 from Bruno Nova (brunonova) installed
mjrodriguez@cis106:~$ sudo snap remove tetris-in-racket
tetris-in-racket removed
mjrodriguez@cis106:~$

```

Practice 4: Working with flatpak

