

# Week Report 3

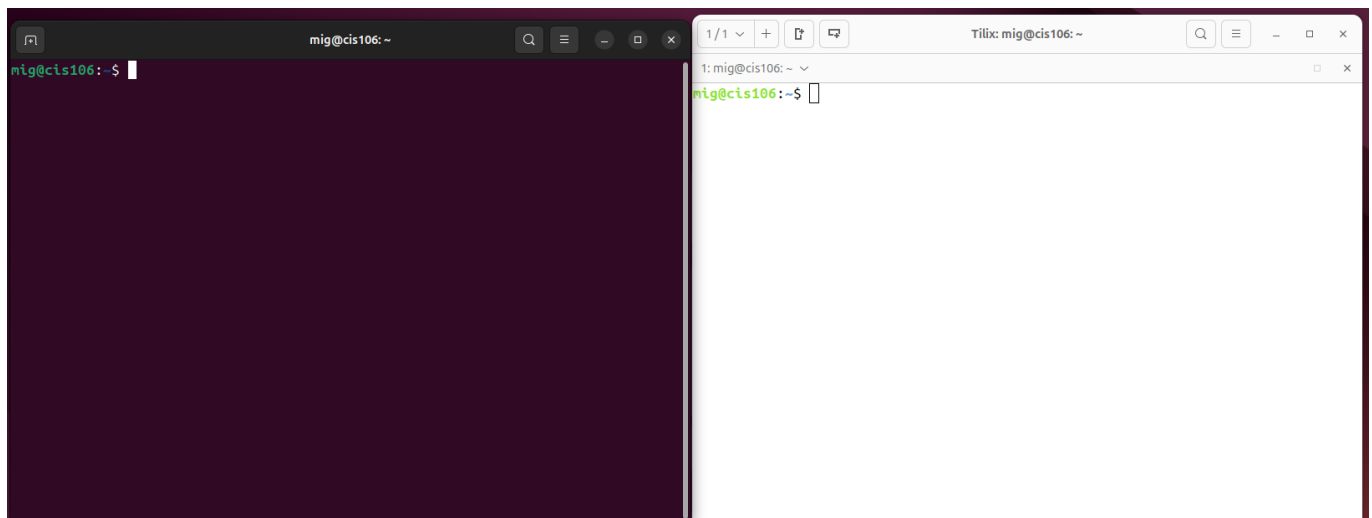
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## Completed Work Week 3

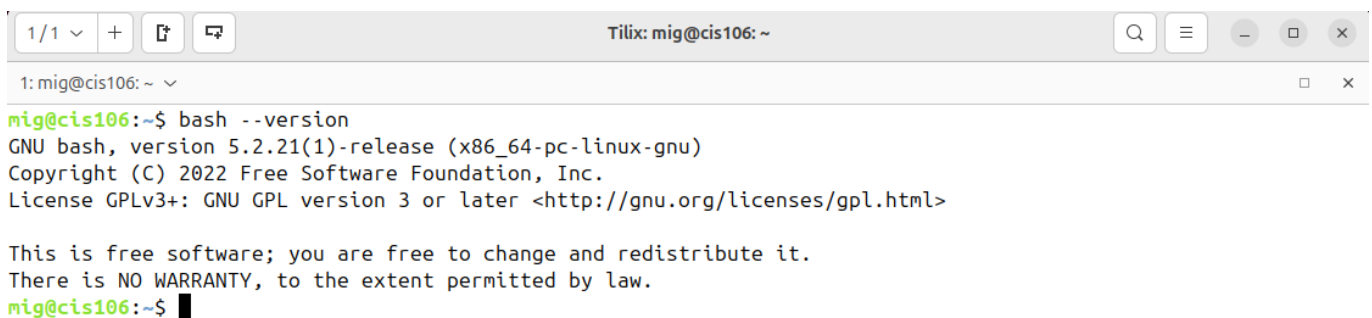
- [Lab3](#)
- [Notes3](#)
- [Managing Software Cheat Sheet](#)

## Practice

### Practice 1



### Practice 2

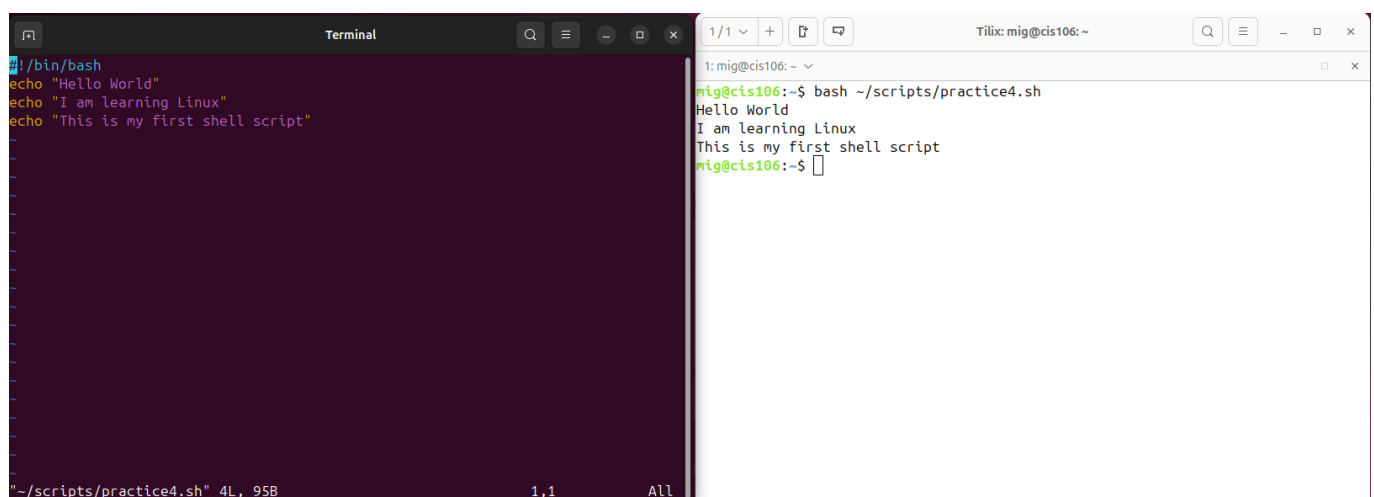


## Practice 3



```
1/1 v + [ ] [ ] Tilix: mig@cis106: ~
1: mig@cis106: ~ v
136 clear
137 bash ~/cis106/labs/lab3/lab3-script1.sh
138 bash ~/cis106/labs/lab3/challenge-lab3.sh
139 git pull
140 git add .
141 git commit -m "lab3 done"
142 git push
143 git pull
144 git add .
145 git commit -m "note3 done"
146 git push
147 bash --version
148 clear
149 date
150 echo "hello world"
151 uname -a
152 history
mig@cis106:~$ !130
echo "hello class"
hello class
mig@cis106:~$ echo "hello"
hello
mig@cis106:~$ !! world
echo "hello" world
hello world
mig@cis106:~$
```

## Practice 4



```
Terminal
~/bin/bash
echo "Hello World"
echo "I am learning Linux"
echo "This is my first shell script"

~/scripts/practice4.sh 4L, 95B 1,1 All

Tilix: mig@cis106: ~
1: mig@cis106: ~ v
mig@cis106:~$ bash ~/scripts/practice4.sh
Hello World
I am learning Linux
This is my first shell script
mig@cis106:~$
```

## Practice 5

1/1 + [icons]

Tilix: mig@cis106: ~

[icons]

1: mig@cis106: ~

2: mig@cis106: ~

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

```
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, ex-
        cept omit -p and -i if unknown:

    -s, --kernel-name
        print the kernel name

    -n, --nodename
        print the network node hostname

    -r, --kernel-release
        print the kernel release

    -v, --kernel-version
        print the kernel version

Manual page uname(1) line 1 (press h for help or q to quit)
```

Practice 6

1/1 + [icons]

Tilix: mig@cis106: ~

[icons]

1: mig@cis106: ~

2: mig@cis106: ~

```
-P, --preprocessor=SIRING  SIRING indicates which preprocessors
to run:
    e - [n]eqn, p - pic, t - tbl,
g - grap, r - refer, v - vgrind

-t, --troff                use groff to format pages
-T, --troff-device=DEVICE  use groff with selected device

-H, --html[=BROWSER]      use www-browser or BROWSER to displa
y HTML output
-X, --gxditview[=RESOLUTION]  use groff and display through gx
ditview

(X11):
-X = -TX75, -X100 = -TX100, -X100-12
= -TX100-12
-Z, --ditroff              use groff and force it to produce di
troff

-?, --help                 give this help list
--usage                    give a short usage message
-V, --version              print program version

Mandatory or optional arguments to long options are also mandator
y or optional
for any corresponding short options.

Report bugs to cjwatson@debian.org.
mig@cis106:~$ date --help
Usage: date [OPTION]... [+FORMAT]
or: date [-u|--utc|--universal] [MMDDhhmm[[CC]YY][.ss]]
Display date and time in the given FORMAT.
With -s, or with [MMDDhhmm[[CC]YY][.ss]], set the date and time.
```

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

Practice 7

```

1/1 v + [ ] [ ]
Tilix: mig@cis106: ~
1: mig@cis106: ~
grow, mark and tweak your common history
branch      List, create, or delete branches
commit      Record changes to the repository
merge       Join two or more development histories together
rebase      Reapply commits on top of another base tip
reset       Reset current HEAD to the specified state
switch      Switch branches
tag         Create, list, delete or verify a tag object signed with GPG

collaborate (see also: git help workflows)
fetch       Download objects and refs from another repository
pull        Fetch from and integrate with another repository or a local branch
push        Update remote refs along with associated objects

'git help -a' and 'git help -g' list available subcommands and some
concept guides. See 'git help <command>' or 'git help <concept>'
to read about a specific subcommand or concept.
See 'git help git' for an overview of the system.
mig@cis106:~$ ssh
usage: ssh [-46AaCfGgKkMnNqsTtVvXxYy] [-B bind_interface] [-b bind_address]
          [-c cipher_spec] [-D [bind_address:]port] [-E log_file]
          [-e escape_char] [-F configfile] [-I pkcs11] [-i identity_file]
          [-J destination] [-L address] [-l login_name] [-m mac_spec]
          [-O ctl_cmd] [-o option] [-P tag] [-p port] [-R address]
          [-S ctl_path] [-W host:port] [-w local_tun[:remote_tun]]
          destination [command [argument ...]]
          ssh [-Q query_option]

mig@cis106:~$ tar
tar: You must specify one of the '-Acddtrux', '--delete' or '--test-label' options
Try 'tar --help' or 'tar --usage' for more information.
mig@cis106:~$

2: mig@cis106: ~
mig@cis106:~$ sudo snap install cheat
[sudo] password for mig:
snap "cheat" is already installed, see 'snap help refresh'
mig@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 (24.0+dfsg-1ubuntu1.1).
0 upgraded, 0 newly installed, 0 to remove and 101 not upgraded.
mig@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

```

## Practice 1 - Managing Software

```

1/1 v + [ ] [ ]
Tilix: mig@cis106: ~
1: mig@cis106: ~
mig@cis106:~$ bastet
mig@cis106:~$ sudo apt remove bastet
[sudo] password for mig:
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 101 not upgraded.
After this operation, 214 kB disk space will be freed.
Do you want to continue? [Y/n] y
(Reading database ... 170458 files and directories currently installed.)
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) ...
mig@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 101 not upgraded.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n] y
(Reading database ... 170448 files and directories currently installed.)
Purging configuration files for bastet (0.43-7build1) ...

2: mig@cis106: ~
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libboost-program-options1.83.0
The following NEW packages will be installed:
  bastet libboost-program-options1.83.0
0 upgraded, 2 newly installed, 0 to remove and 101 not upgraded.
Need to get 396 kB of archives.
After this operation, 2,675 kB of additional disk space will be used.
Get:1 http://us.archive.ubuntu.com/ubuntu noble-updates/main amd64 libboost-program-optio
ns1.83.0 amd64 1.83.0-2.1ubuntu3.1 [320 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu noble/universe amd64 bastet amd64 0.43-7build1
[75.1 kB]
Fetched 396 kB in 0s (2,152 kB/s)
Preconfiguring packages ...
Selecting previously unselected package libboost-program-options1.83.0:amd64.
(Reading database ... 170442 files and directories currently installed.)
Preparing to unpack .../libboost-program-options1.83.0_1.83.0-2.1ubuntu3.1_amd64.deb ...
Unpacking libboost-program-options1.83.0:amd64 (1.83.0-2.1ubuntu3.1) ...
Selecting previously unselected package bastet.
Preparing to unpack .../bastet_0.43-7build1_amd64.deb ...
Unpacking bastet (0.43-7build1) ...
Setting up libboost-program-options1.83.0:amd64 (1.83.0-2.1ubuntu3.1) ...
Setting up bastet (0.43-7build1) ...
Processing triggers for desktop-file-utils (0.27-2build1) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for libc-bin (2.39-0ubuntu8.4) ...
Processing triggers for man-db (2.12.0-4build2) ...
mig@cis106:~$ man bastet
mig@cis106:~$

```

## Practice 3 - Managing Software

1 / 1 + [icons]

Tilix: mig@cis106: ~

[icons]

1: mig@cis106: ~

2: mig@cis106: ~

```
mig@cis106:~$ tetris-in-racket --help
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
mig@cis106:~$
```

```
mig@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.
pntris      1.0       kz6fittycent  -      Poor Man's Tetris Clone
ltris-windows  1.2.3     marisag1967  -      A free Tetris clone that follows the orig
inal rules but adds some extras
mig@cis106:~$ sudo snap install tetris-in-racket
tetris-in-racket 1.2-2 from Bruno Nova (brunonova) installed
mig@cis106:~$ sudo snap remove tetris-in-racket
tetris-in-racket removed
mig@cis106:~$
```