

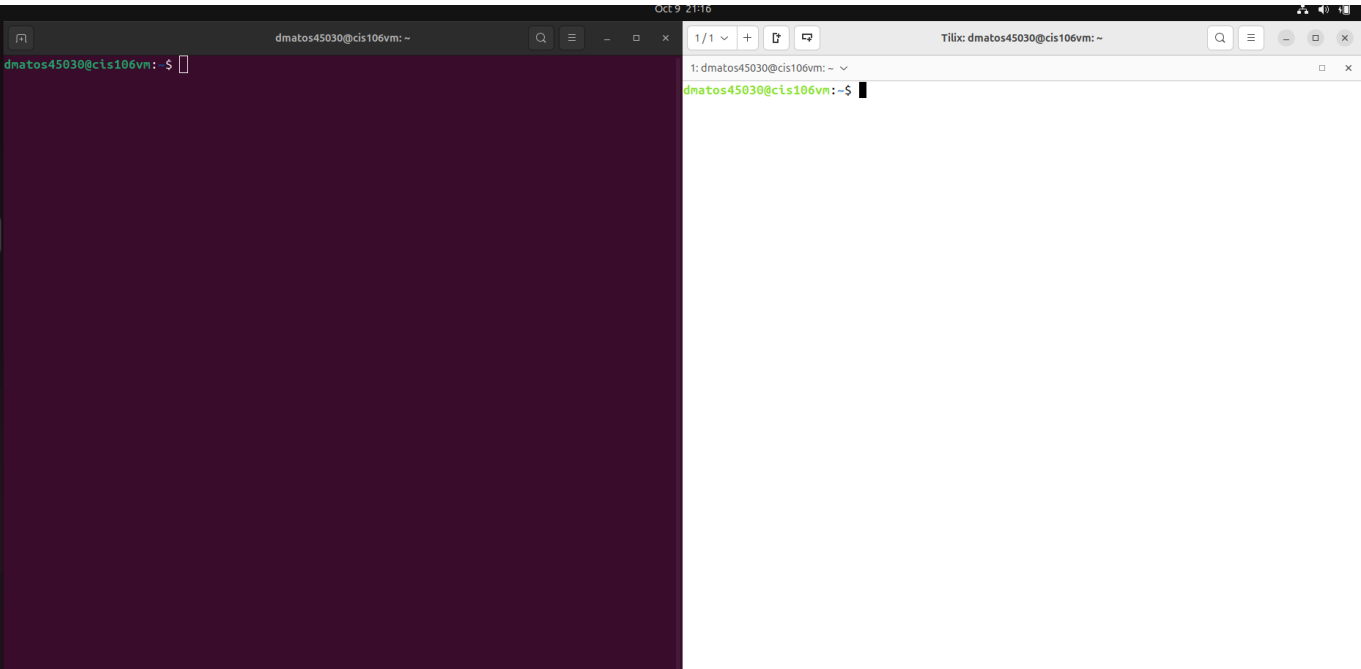
Week Report 3

Completed work for week 3

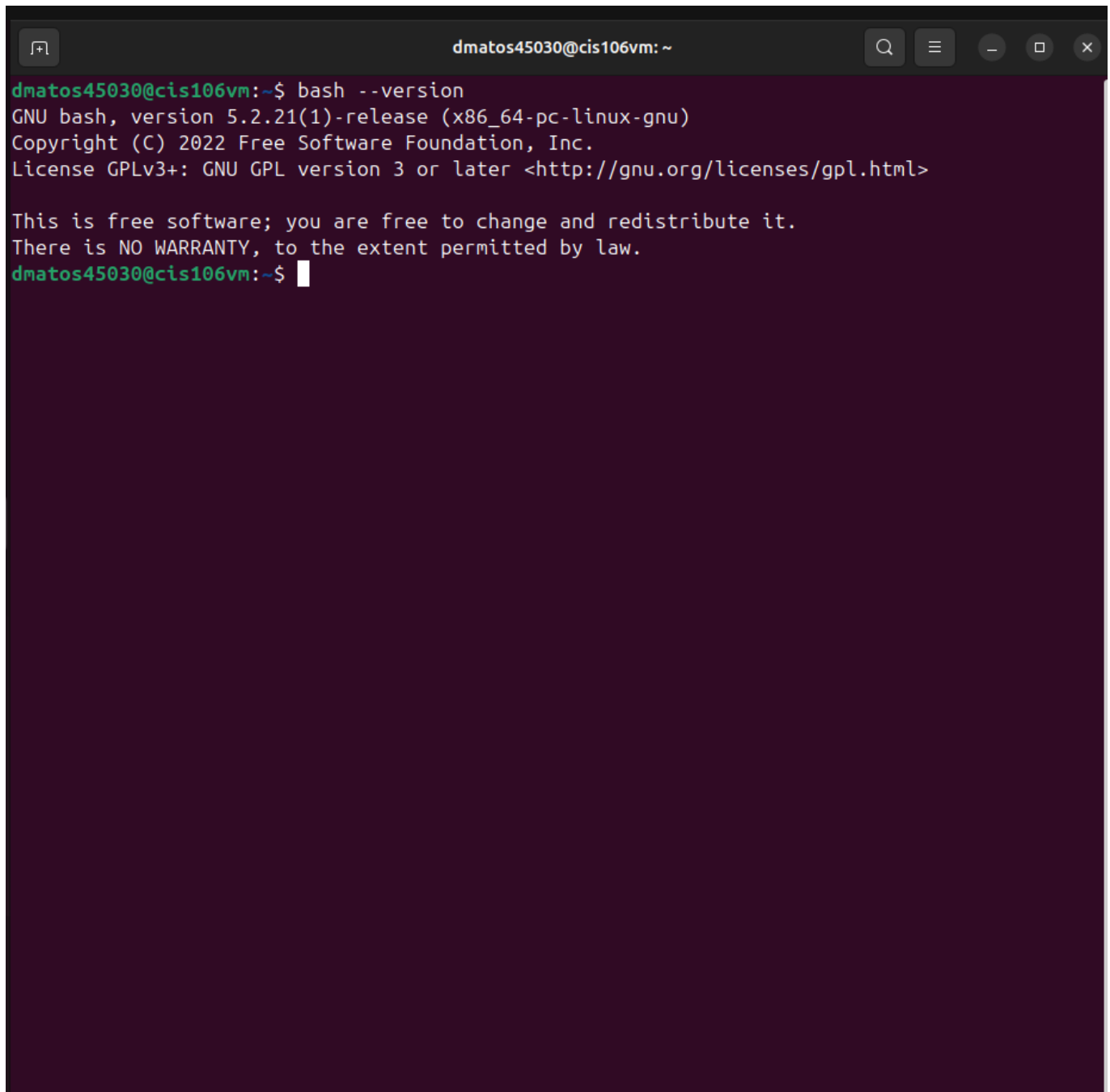
- [Lab3](#)
- [Notes3](#)

Practice

Practice 1



Practice 2

A terminal window with a dark background and light green text. The window title bar shows 'dmatos45030@cis106vm: ~' and standard window controls. The terminal content shows the command 'bash --version' and its output: '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>', and a disclaimer: 'This is free software; you are free to change and redistribute it. There is NO WARRANTY, to the extent permitted by law.' The prompt 'dmatos45030@cis106vm:~\$' is followed by a cursor.

```
dmatos45030@cis106vm:~$ 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.
dmatos45030@cis106vm:~$
```

Practice 3

```
127 df
128 df -h
129 df -x
130 df --exclude-type=tmpfs
131 clear
132 bash ~/cis106/Labs/Lab3/challenge_lab3.sh
133 echo "\nhi"
134 echo "\n hi"
135 echo -e "\n hi"
136 bash ~/cis106/Labs/Lab3/challenge_lab3.sh
137 clear
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 "notes3"
146 git push
147 bash --version
148 clear
149 date
150 echo "hello world"
151 uname -a
152 history
dmatos45030@cis106vm:~$ !#
dmatos45030@cis106vm:~$ echo "hello world"
hello world
dmatos45030@cis106vm:~$ !!
echo "hello world"
hello world
dmatos45030@cis106vm:~$ echo "hello world"
hello world
dmatos45030@cis106vm:~$ !!world
echo "hello world"world
hello worldworld
dmatos45030@cis106vm:~$
```

Practice 4

```

dmatos45030@cis106vm: ~
bash ~/scripts/hello.sh
bash: /home/dmatos45030/scripts/hello.sh: No such file or directory
dmatos45030@cis106vm:~$ bash ~/cis106/hello.sh
Hello World
I'm learning Linux
This is my first shell script
dmatos45030@cis106vm:~$
```

Practice 5

1/1 + [] []

Tilix: dmatos45030@cis106vm: ~

1: dmatos45030@cis106vm: ~

```
dmatos45030@cis106vm:~$ uname -s
Linux
dmatos45030@cis106vm:~$ uname -n
cis106vm
dmatos45030@cis106vm:~$ uname -io
x86_64 GNU/Linux
dmatos45030@cis106vm:~$ uname -s
Linux
dmatos45030@cis106vm:~$ uname -n
cis106vm
dmatos45030@cis106vm:~$ uname -io
uname: invalid option -- '0'
Try 'uname --help' for more information.
dmatos45030@cis106vm:~$ uname -io
x86_64 GNU/Linux
dmatos45030@cis106vm:~$ man date
dmatos45030@cis106vm:~$ man df
dmatos45030@cis106vm:~$ man free
dmatos45030@cis106vm:~$ man clear
dmatos45030@cis106vm:~$ man history
dmatos45030@cis106vm:~$ free -giga
```

	total	used	free	shared	buff/cache	available
Mem:	4	3	0	0	1	1
Swap:	4	1	2			

```
dmatos45030@cis106vm:~$
```

2: dmatos45030@cis106vm: ~

FREE(1)

User Commands

FREE(1)

NAME

free - Display amount of free and used memory in the system

SYNOPSIS

free [options]

DESCRIPTION

free displays the total amount of free and used physical and swap memory in the system, as well as the buffers and caches used by the kernel. The information is gathered by parsing /proc/meminfo. The displayed columns are:

total Total usable memory (MemTotal and SwapTotal in /proc/meminfo). This includes the physical and swap memory minus a few reserved bits and kernel binary code.

used Used or unavailable memory (calculated as **total** - **available**)

free Unused memory (MemFree and SwapFree in /proc/meminfo)

shared Memory used (mostly) by tmpfs (Shmem in /proc/meminfo)

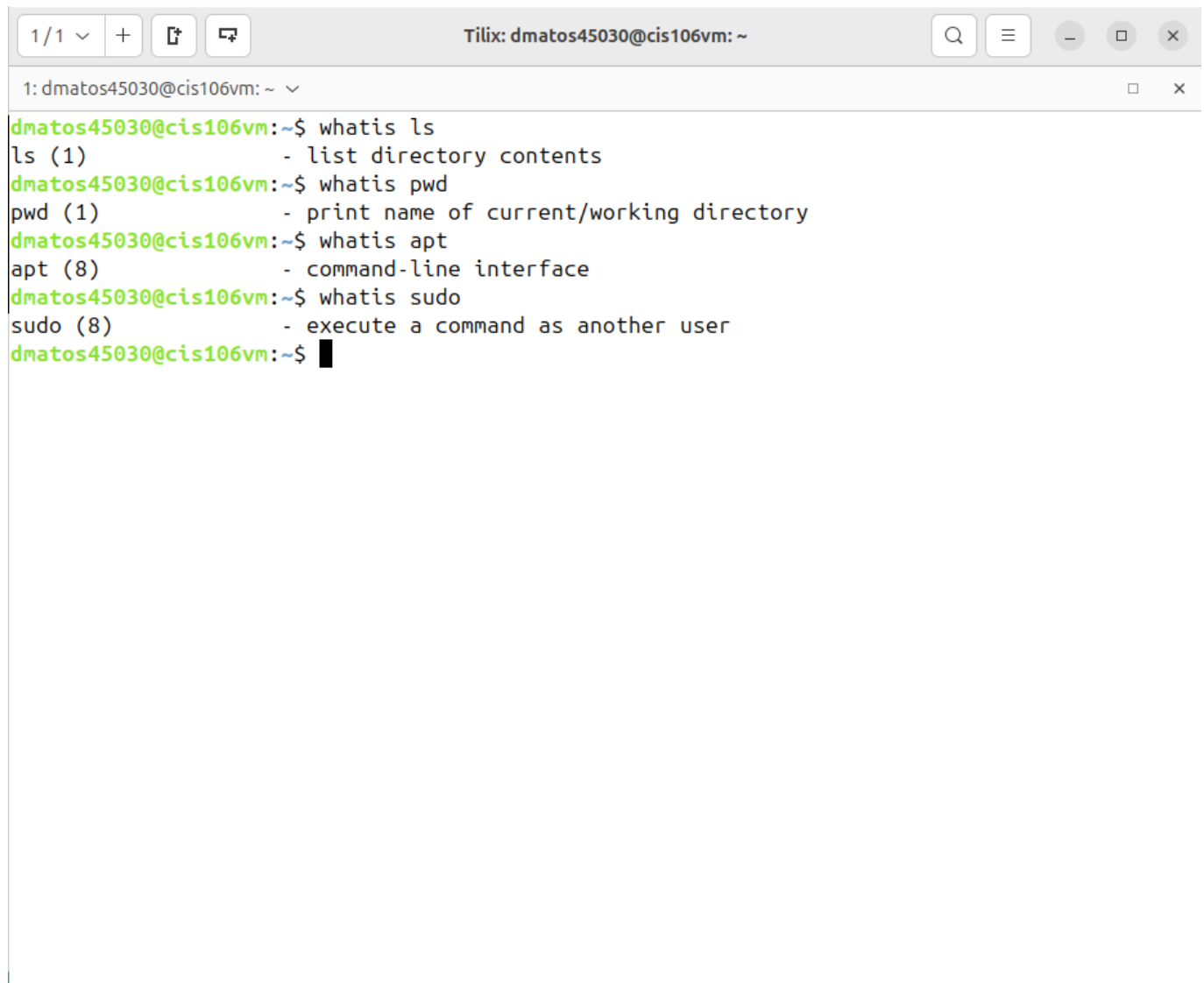
buffers Memory used by kernel buffers (Buffers in /proc/meminfo)

cache Memory used by the page cache and slabs (Cached and SReclaimable in /proc/meminfo)

buff/cache Sum of **buffers** and **cache**

available Estimation of how much memory is available for starting new applications, without swapping. Unlike the data provided by the **cache** or **free** fields, this field takes into account page cache and also that not all reclaimable

Practice 6



A terminal window titled "Tilix: dmatos45030@cis106vm: ~" showing the output of the 'whatis' command for several Linux utilities. The terminal output is as follows:

```
dmatos45030@cis106vm:~$ whatis ls
ls (1)                - list directory contents
dmatos45030@cis106vm:~$ whatis pwd
pwd (1)               - print name of current/working directory
dmatos45030@cis106vm:~$ whatis apt
apt (8)               - command-line interface
dmatos45030@cis106vm:~$ whatis sudo
sudo (8)              - execute a command as another user
dmatos45030@cis106vm:~$
```

Practice 7

```

1/1  +  [?] [x] Til
1: dmatos45030@cis106vm: ~
dmatos45030@cis106vm:~$ sudo snap install cheat
[sudo] password for dmatos45030:
cheat 4.4.0.build.2 from Michael (bernermic) installed
dmatos45030@cis106vm:~$ cheat apt
A config file was not found. Would you like to create one now? [Y/n]: n
dmatos45030@cis106vm:~$ cheat git
A config file was not found. Would you like to create one now? [Y/n]: n
dmatos45030@cis106vm:~$ cheat ssh
A config file was not found. Would you like to create one now? [Y/n]: n
dmatos45030@cis106vm:~$ cheat tar
A config file was not found. Would you like to create one now? [Y/n]: n
dmatos45030@cis106vm:~$ sudo apt install
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
0 upgraded, 0 newly installed, 0 to remove and 24 not upgraded.
dmatos45030@cis106vm:~$ sudo apt install python3-pip
Reading package lists... Done
Building dependency tree... Done

```

Practice 1 - Managing Software

```

1: dmatos45030@cis106vm: ~
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 24 not upgraded.
After this operation, 214 kB disk space will be freed.
Do you want to continue? [Y/n] Y
(Reading database ... 166574 files and direct
ories currently installed.)
Removing bastet (0.43-7build1) ...
Processing triggers for hicolor-icon-theme (0
.17-2) ...
Processing triggers for gnome-menus (3.36.0-1
.1ubuntu3) ...
Processing triggers for man-db (2.12.0-4build
2)

```

Practice 3 - Managing Software

```
1/1  +  [ ]  [ ]  T
1: dmatos45030@cis106vm: ~  v
dmatos45030@cis106vm:~$ 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 Te
pmtris             1.0      kz6fittycent -      Poor Man's Tetris Clone
ltris-windows       1.2.3    marisag1967 -      A free Tetris clone that follows th
dmatos45030@cis106vm:~$ sudo snap install tetris-in-racket
tetris-in-racket 1.2-2 from Bruno Nova (brunonova) installed
dmatos45030@cis106vm:~$ sudo snap remove tetris-in-racket
tetris-in-racket removed
dmatos45030@cis106vm:~$
```