

# Week Report 3

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## Completed work for week 3

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

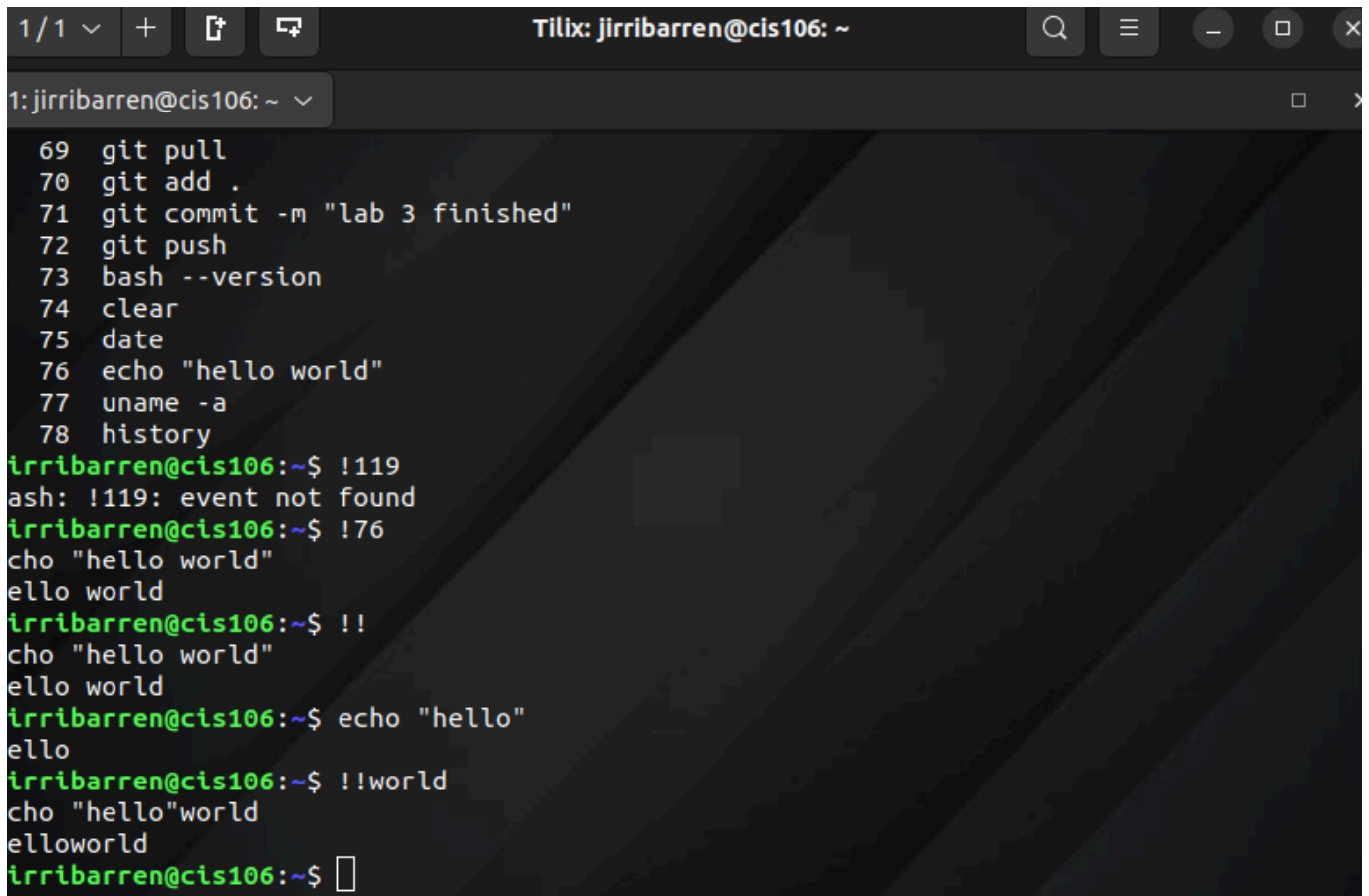
### Practice 2: Accessing the bash shell



The screenshot shows a terminal window titled "Tilix: jirribarren@cis106: ~". The terminal displays the output of the command `bash --version`. The output text is as follows:

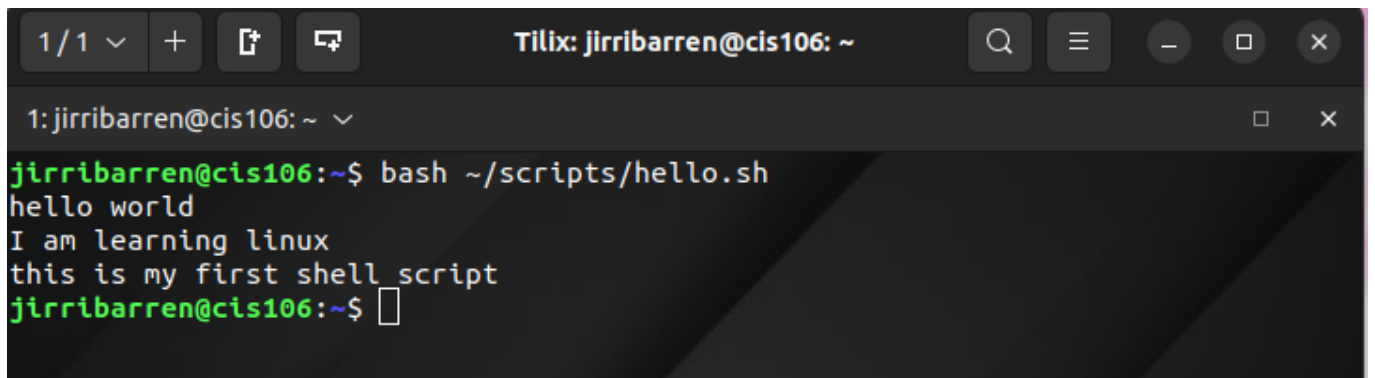
```
1: jirribarren@cis106: ~  
jirribarren@cis106:~$ bash --version  
GNU bash, version 5.1.16(1)-release (aarch64-unknown-linux-gnu)  
Copyright (C) 2020 Free Software Foundation, Inc.  
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>  
  
This is free software; you are free to change and redistribute it.  
There is NO WARRANTY, to the extent permitted by law.  
jirribarren@cis106:~$
```

### Practice 3: Using the command history



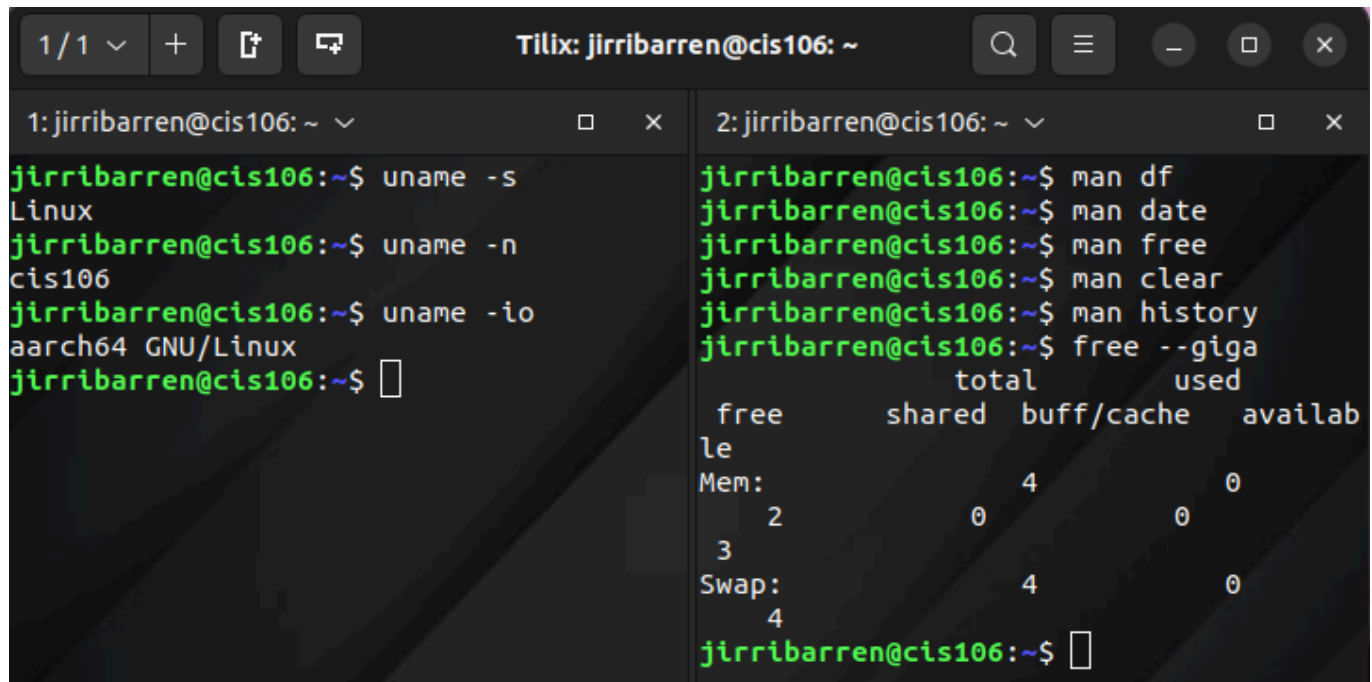
```
1/1  +  [icon] [icon]  Tilix: jirribarren@cis106: ~  [search] [menu] [minus] [maximize] [close]
1: jirribarren@cis106: ~  [icon] [close]
69 git pull
70 git add .
71 git commit -m "lab 3 finished"
72 git push
73 bash --version
74 clear
75 date
76 echo "hello world"
77 uname -a
78 history
jirribarren@cis106:~$ !119
ash: !119: event not found
jirribarren@cis106:~$ !76
cho "hello world"
ello world
jirribarren@cis106:~$ !!
cho "hello world"
ello world
jirribarren@cis106:~$ echo "hello"
ello
jirribarren@cis106:~$ !!world
cho "hello"world
elloworld
jirribarren@cis106:~$
```

#### Practice 4: My first shell script



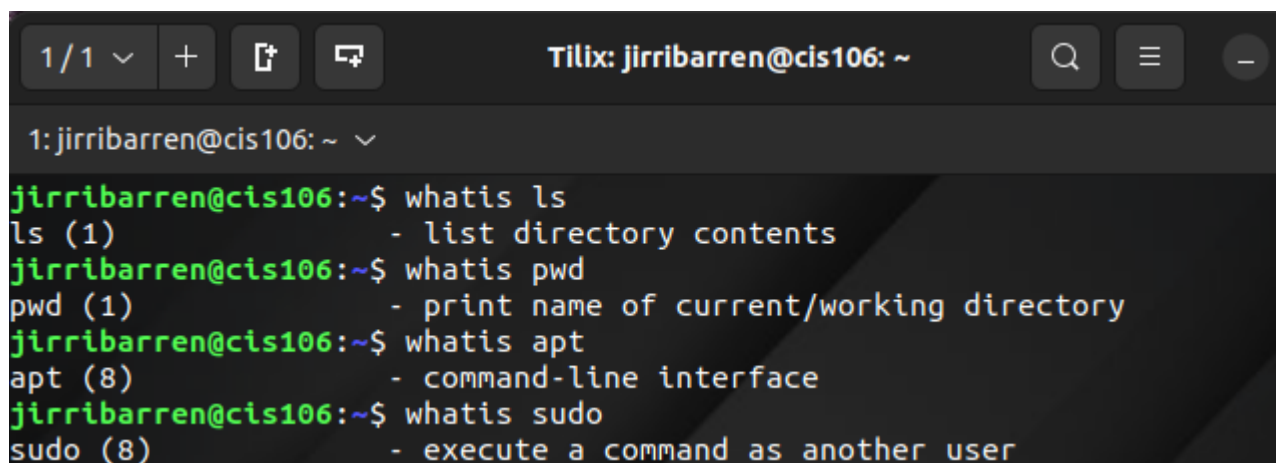
```
1/1  +  [icon] [icon]  Tilix: jirribarren@cis106: ~  [search] [menu] [minus] [maximize] [close]
1: jirribarren@cis106: ~  [icon] [close]
jirribarren@cis106:~$ bash ~/scripts/hello.sh
hello world
I am learning linux
this is my first shell script
jirribarren@cis106:~$
```

#### Practice 5: Using Man



```
1: jirribarren@cis106: ~  
jirribarren@cis106:~$ uname -s  
Linux  
jirribarren@cis106:~$ uname -n  
cis106  
jirribarren@cis106:~$ uname -io  
aarch64 GNU/Linux  
jirribarren@cis106:~$  
2: jirribarren@cis106: ~  
jirribarren@cis106:~$ man df  
jirribarren@cis106:~$ man date  
jirribarren@cis106:~$ man free  
jirribarren@cis106:~$ man clear  
jirribarren@cis106:~$ man history  
jirribarren@cis106:~$ free --giga  
total used  
free shared buff/cache availab  
le  
Mem: 2 0 4 0  
3  
Swap: 4 0  
jirribarren@cis106:~$
```

## Practice 6: Using help



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

## Practice 7: Using Cheat!

```
jirribarren@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/

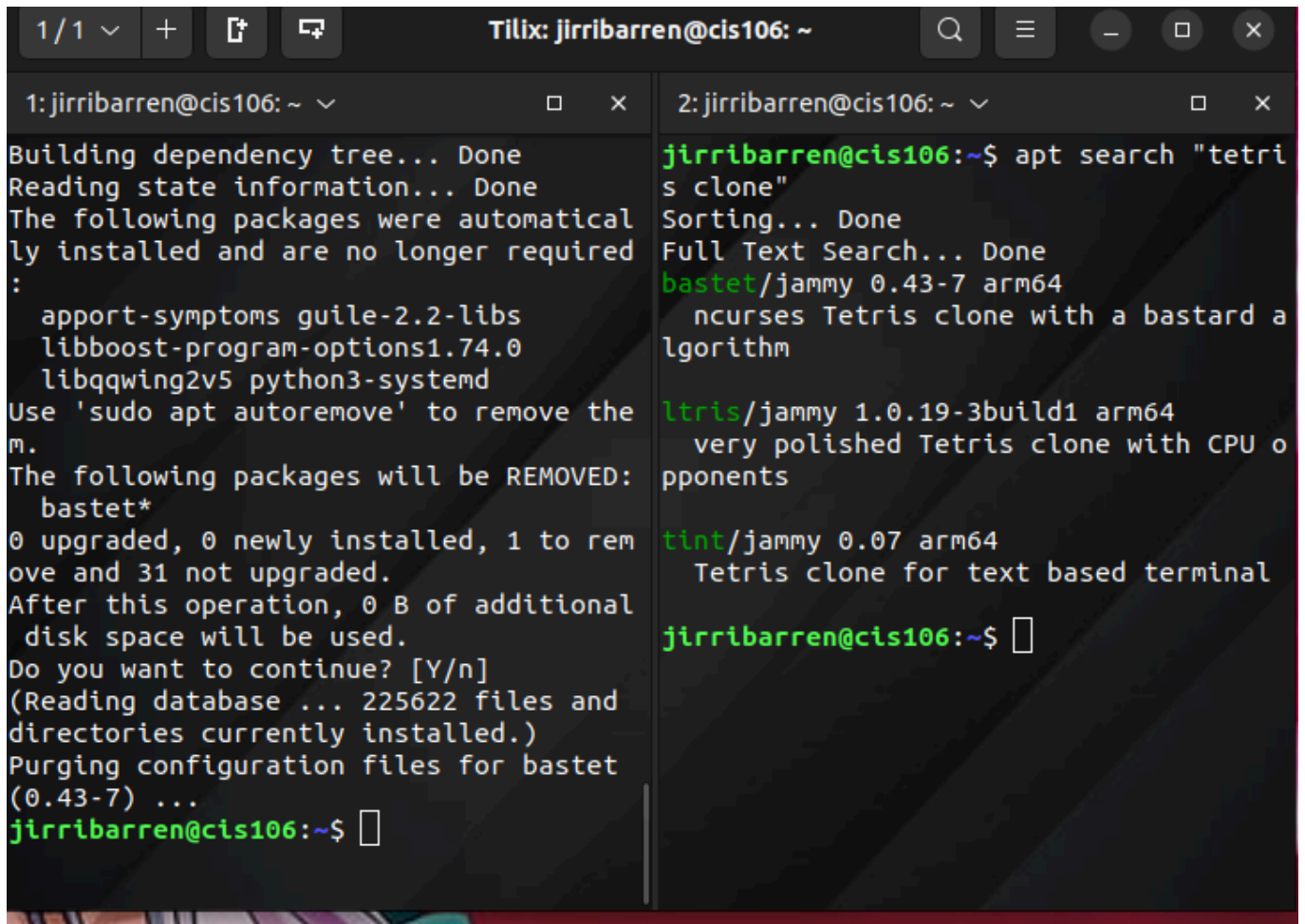
# To list the content of an .tar.bz2 archive:
tar -tjvf /path/to/foo.tar.bz2

# 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 ...
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>
```

## Practice 1: Managing software

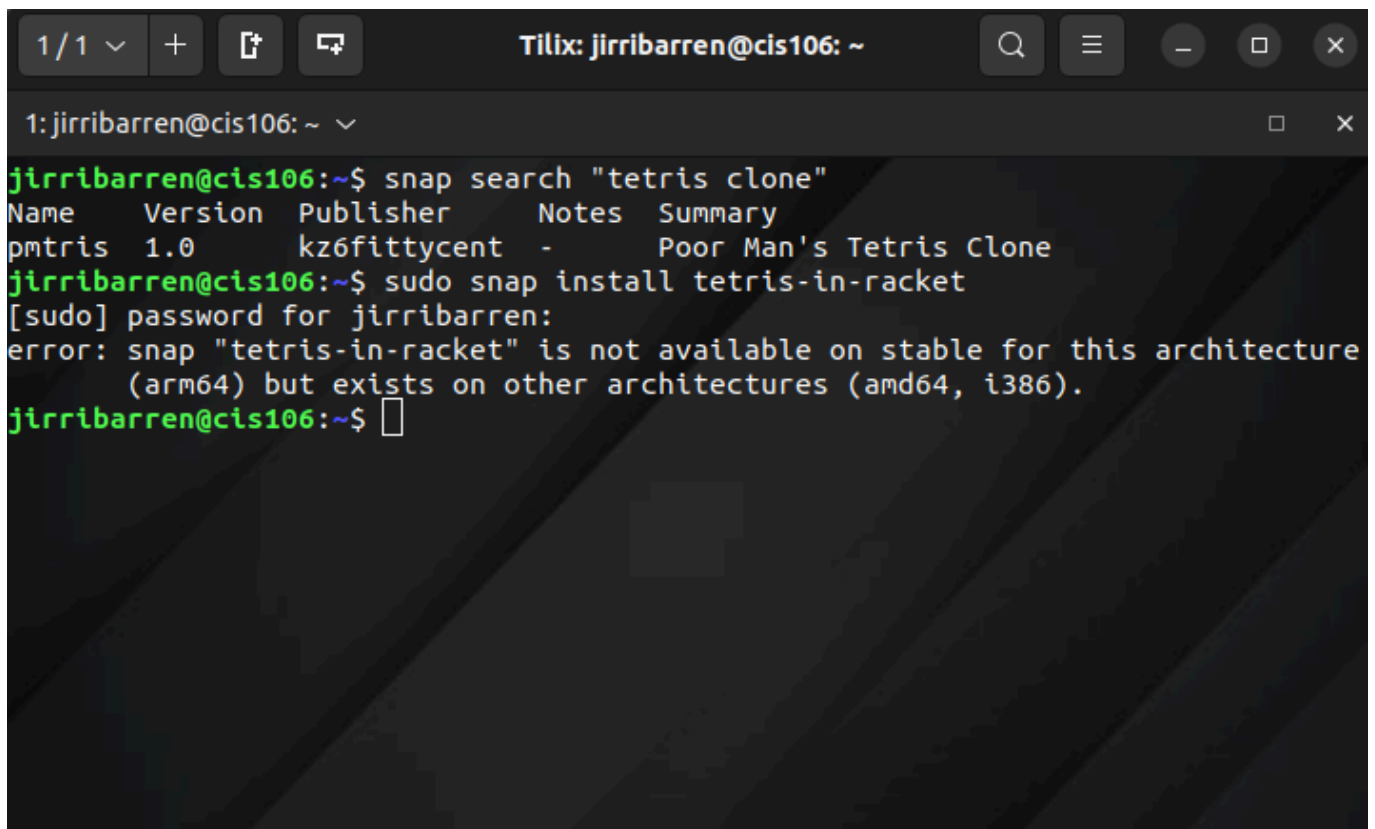


```
1/1 ▾ + [📄] [🔄] Tilix: jirribarren@cis106: ~ 🔍 ☰ - □ ×

1: jirribarren@cis106: ~ ▾ □ ×
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  appport-symptoms guile-2.2-libs libboost-program-options1.74.0 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 31 not upgraded.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n]
(Reading database ... 225622 files and directories currently installed.)
Purging configuration files for bastet (0.43-7) ...
jirribarren@cis106:~$

2: jirribarren@cis106: ~ ▾ □ ×
jirribarren@cis106:~$ apt search "tetris clone"
Sorting... Done
Full Text Search... Done
bastet/jammy 0.43-7 arm64
  ncurses Tetris clone with a bastard algorithm
ltris/jammy 1.0.19-3build1 arm64
  very polished Tetris clone with CPU optimizations
tint/jammy 0.07 arm64
  Tetris clone for text based terminal
jirribarren@cis106:~$
```

### Practice 3: Installing and removing snaps



```
1/1 ▾ + [📄] [🔄] Tilix: jirribarren@cis106: ~ 🔍 ☰ - □ ×

1: jirribarren@cis106: ~ ▾ □ ×
jirribarren@cis106:~$ snap search "tetris clone"
Name      Version  Publisher      Notes  Summary
pmtris    1.0      kz6fittycent   -      Poor Man's Tetris Clone
jirribarren@cis106:~$ sudo snap install tetris-in-racket
[sudo] password for jirribarren:
error: snap "tetris-in-racket" is not available on stable for this architecture
      (arm64) but exists on other architectures (amd64, i386).
jirribarren@cis106:~$
```