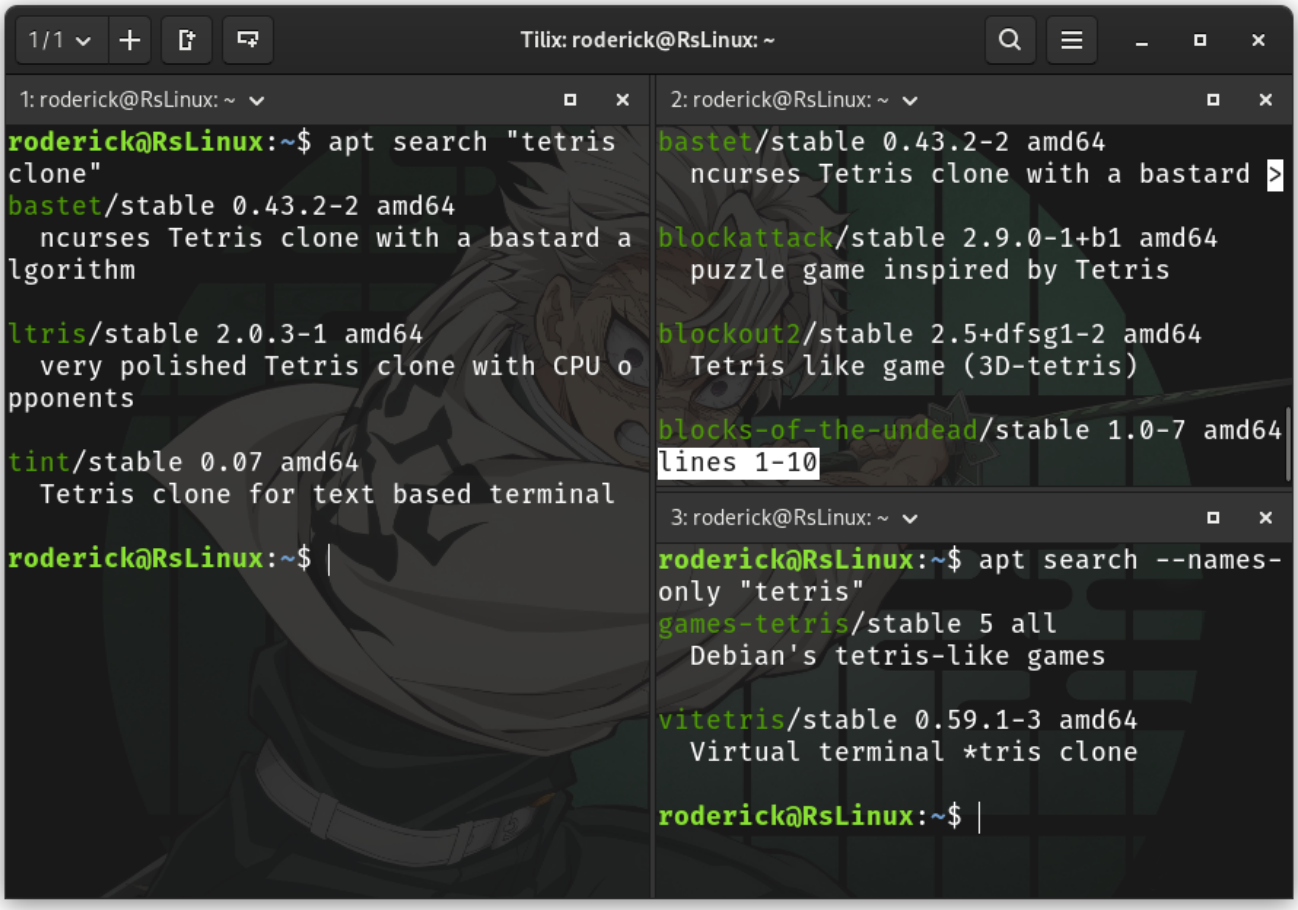
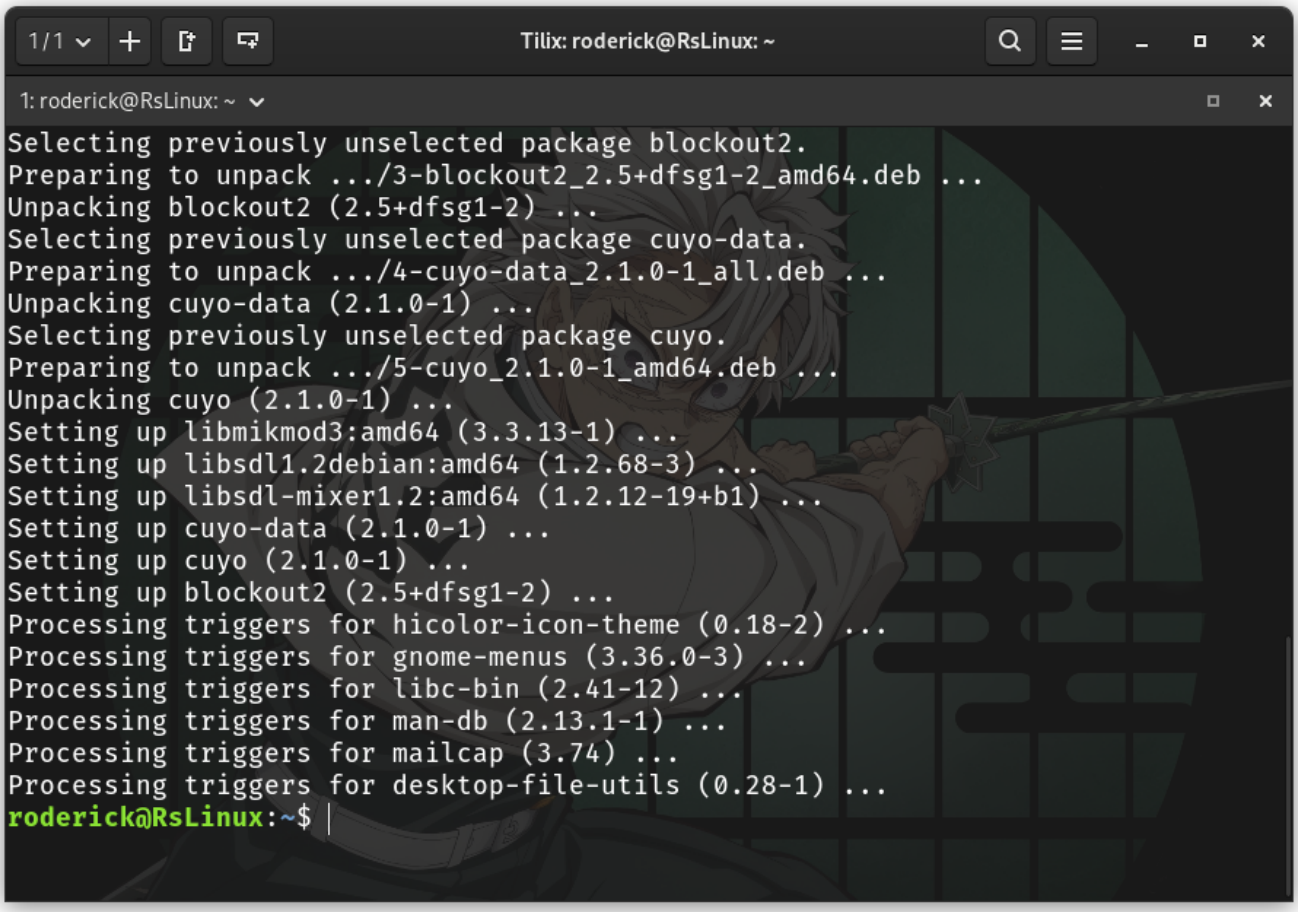
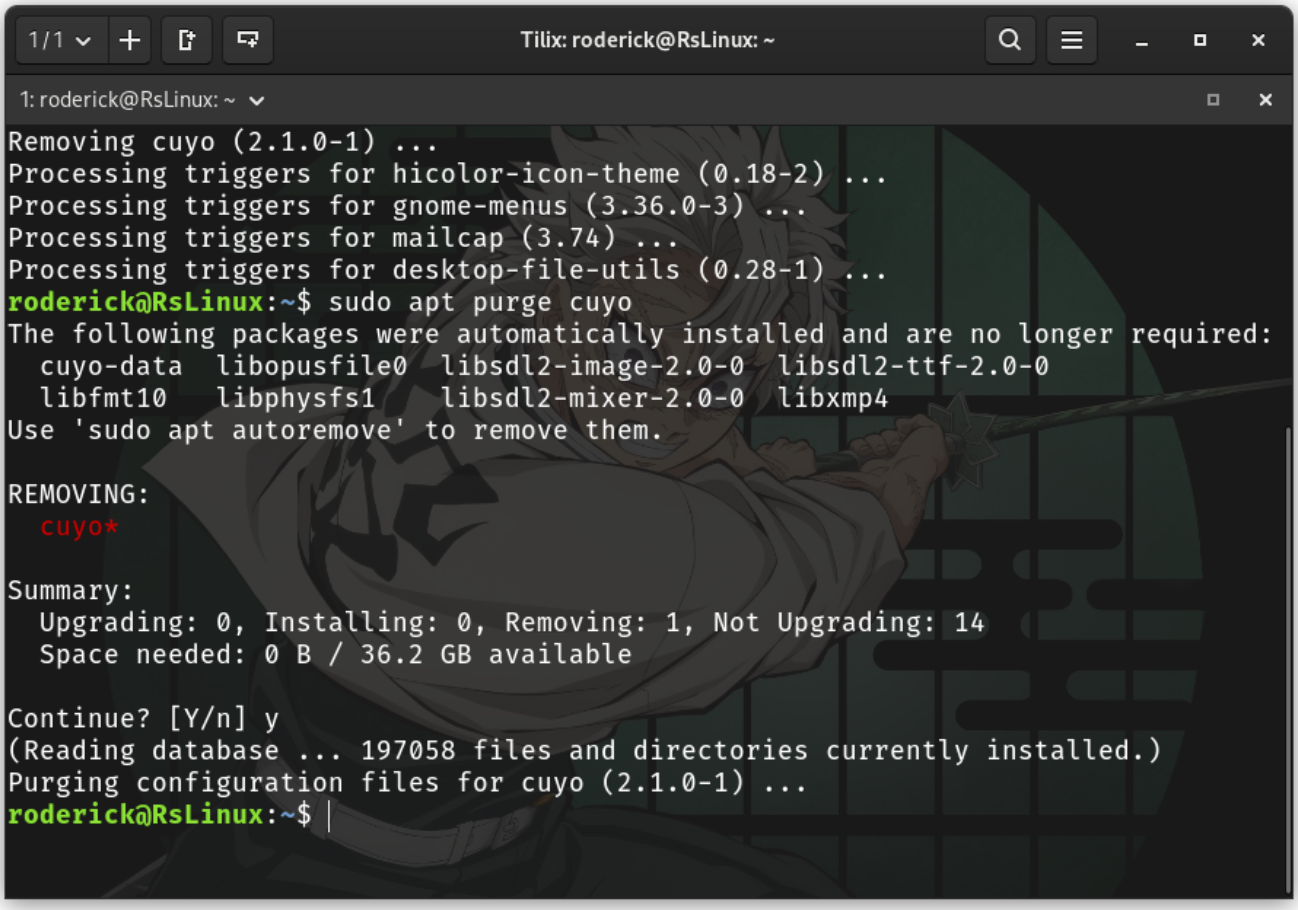
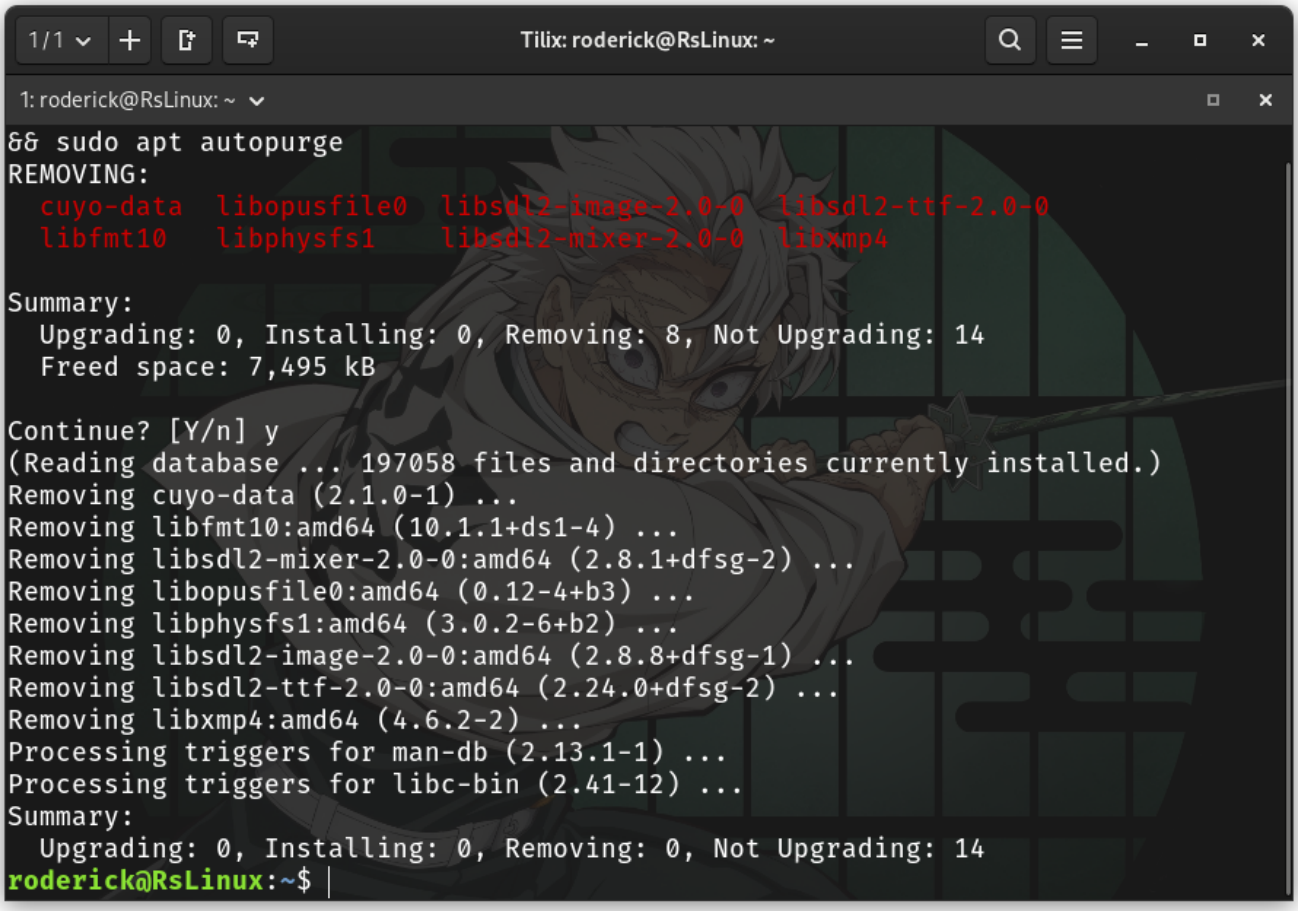
Completed Lab 4

Question 1 screenshots

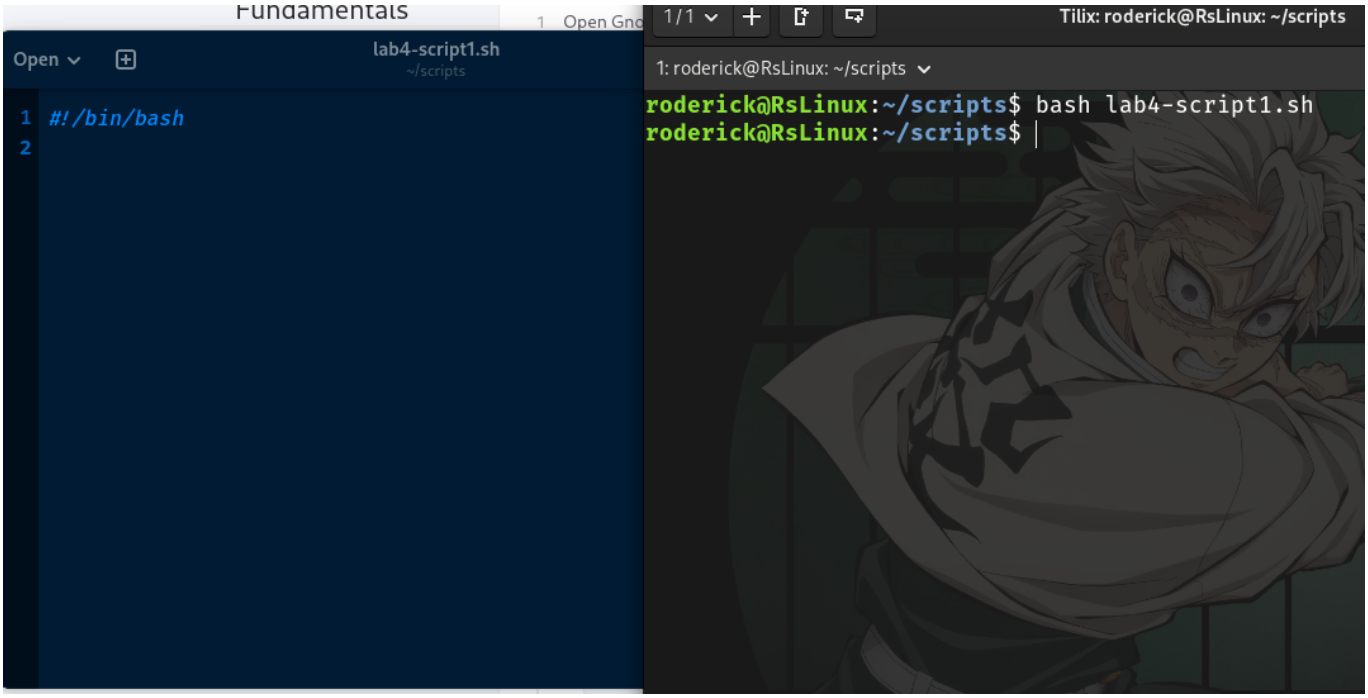

1/1
Tilix: roderick@RsLinux: ~
1: roderick@RsLinux: ~
2: roderick@RsLinux: ~
3: roderick@RsLinux: ~
roderick@RsLinux:~$ apt search "tetris clone"
bastet/stable 0.43.2-2 amd64
ncurses Tetris clone with a bastard algorithm
ltris/stable 2.0.3-1 amd64
very polished Tetris clone with CPU opponents
tint/stable 0.07 amd64
Tetris clone for text based terminal
roderick@RsLinux:~$
bastet/stable 0.43.2-2 amd64
ncurses Tetris clone with a bastard
blockattack/stable 2.9.0-1+b1 amd64
puzzle game inspired by Tetris
blockout2/stable 2.5+dfsg1-2 amd64
Tetris like game (3D-tetris)
blocks-of-the-undead/stable 1.0-7 amd64
lines 1-10
roderick@RsLinux:~$ apt search --names-only "tetris"
games-tetris/stable 5 all
Debian's tetris-like games
vitetris/stable 0.59.1-3 amd64
Virtual terminal *tris clone
roderick@RsLinux:~$

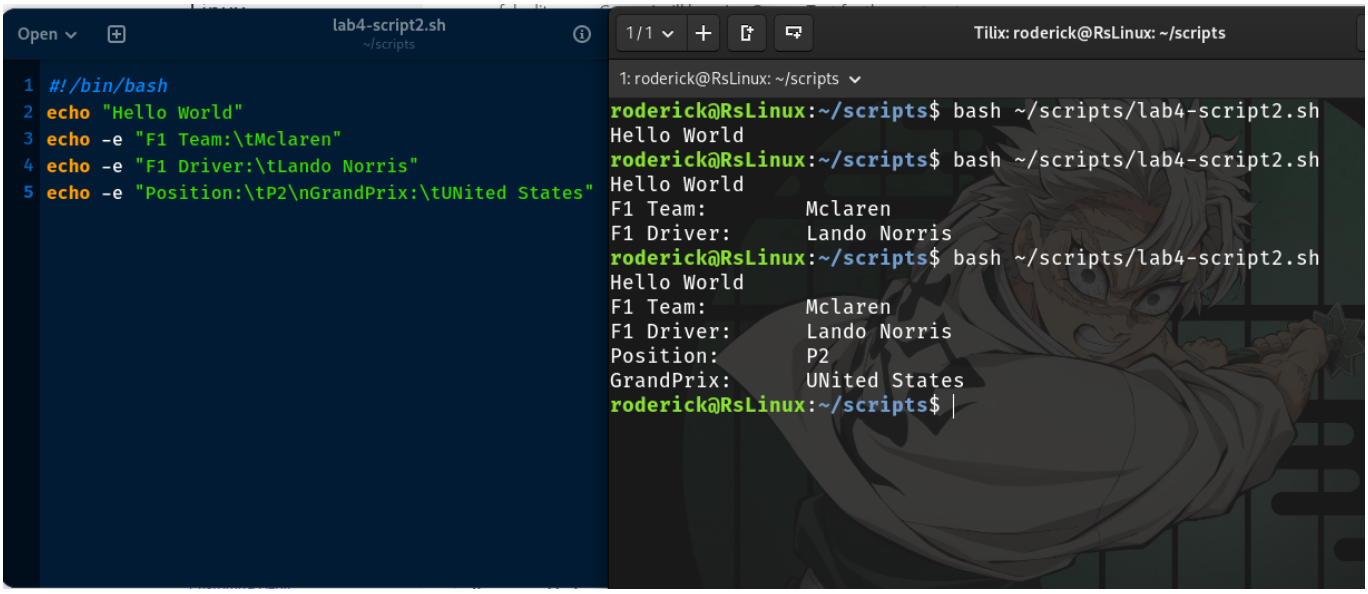

1/1
Tilix: roderick@RsLinux: ~
1: roderick@RsLinux: ~
Selecting previously unselected package blockout2.
Preparing to unpack .../3-blockout2_2.5+dfsg1-2_amd64.deb ...
Unpacking blockout2 (2.5+dfsg1-2) ...
Selecting previously unselected package cuyo-data.
Preparing to unpack .../4-cuyo-data_2.1.0-1_all.deb ...
Unpacking cuyo-data (2.1.0-1) ...
Selecting previously unselected package cuyo.
Preparing to unpack .../5-cuyo_2.1.0-1_amd64.deb ...
Unpacking cuyo (2.1.0-1) ...
Setting up libmikmod3:amd64 (3.3.13-1) ...
Setting up libsdl1.2debian:amd64 (1.2.68-3) ...
Setting up libsdl-mixer1.2:amd64 (1.2.12-19+b1) ...
Setting up cuyo-data (2.1.0-1) ...
Setting up cuyo (2.1.0-1) ...
Setting up blockout2 (2.5+dfsg1-2) ...
Processing triggers for hicolor-icon-theme (0.18-2) ...
Processing triggers for gnome-menus (3.36.0-3) ...
Processing triggers for libc-bin (2.41-12) ...
Processing triggers for man-db (2.13.1-1) ...
Processing triggers for mailcap (3.74) ...
Processing triggers for desktop-file-utils (0.28-1) ...
roderick@RsLinux:~$

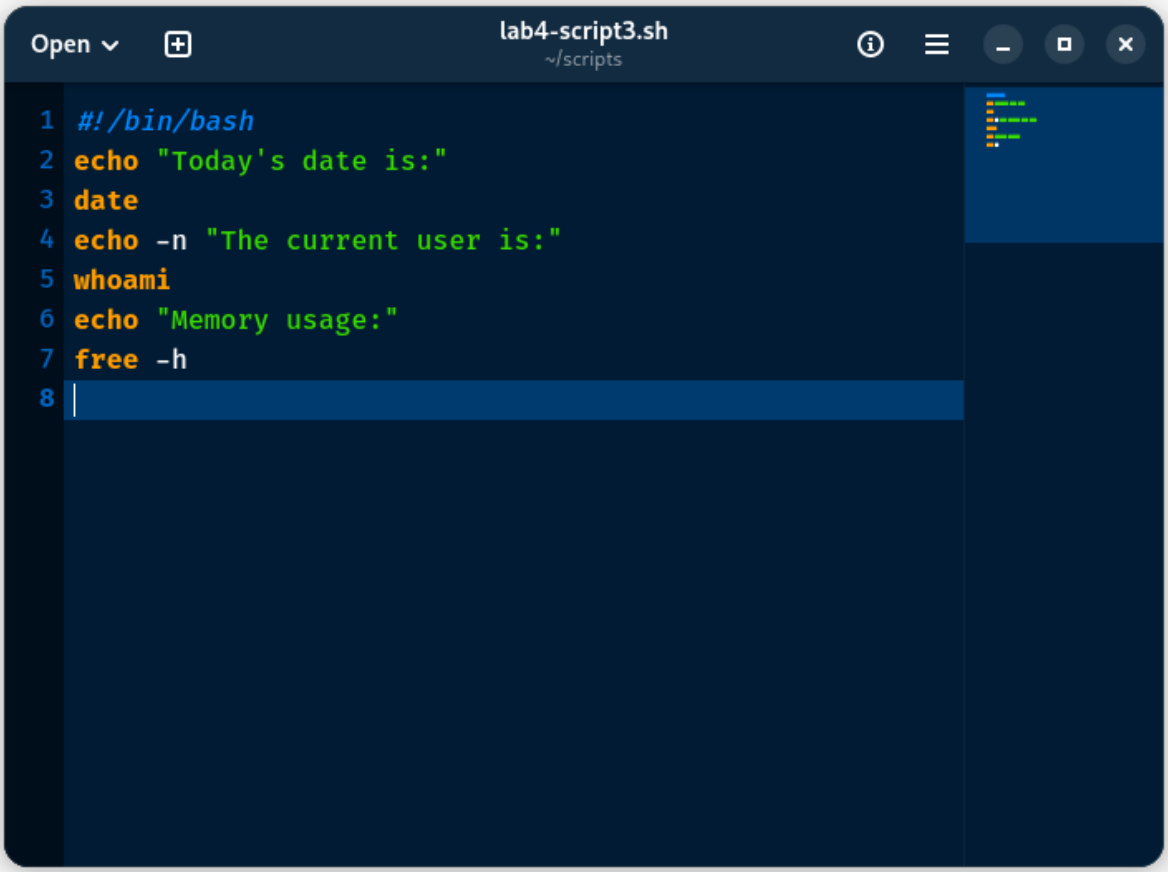


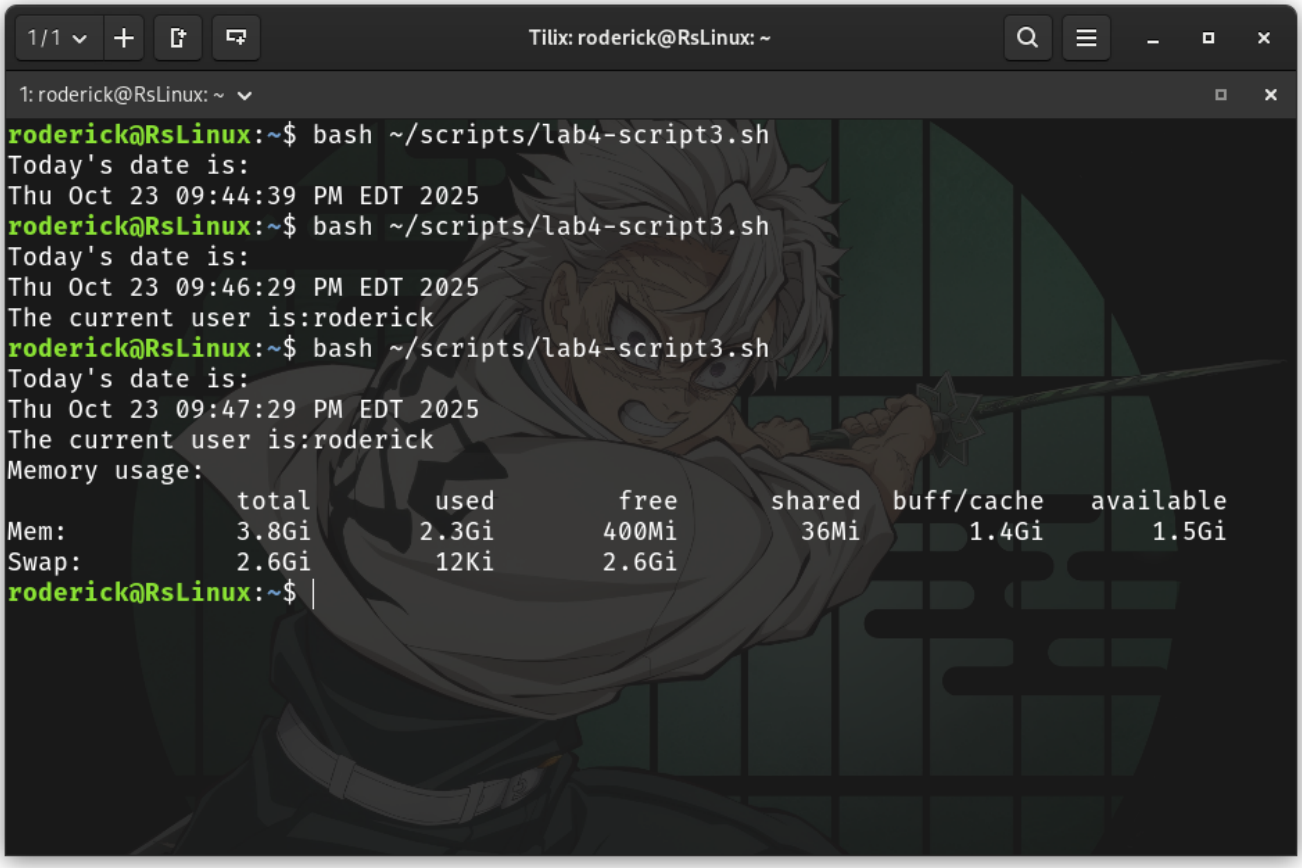


Question 2 screenshots


Fundamentals
Open
lab4-script1.sh
~/scripts
1 #!/bin/bash
2
1/1
Tilix: roderick@RsLinux: ~/scripts
1: roderick@RsLinux: ~/scripts
roderick@RsLinux:~/scripts$ bash lab4-script1.sh
roderick@RsLinux:~/scripts$


Open
lab4-script2.sh
~/scripts
1 #!/bin/bash
2 echo "Hello World"
3 echo -e "F1 Team:\tMclaren"
4 echo -e "F1 Driver:\tLando Norris"
5 echo -e "Position:\tP2\nGrandPrix:\tUNited States"
1/1
Tilix: roderick@RsLinux: ~/scripts
1: roderick@RsLinux: ~/scripts
roderick@RsLinux:~/scripts$ bash ~/scripts/lab4-script2.sh
Hello World
roderick@RsLinux:~/scripts$ bash ~/scripts/lab4-script2.sh
Hello World
F1 Team: Mclaren
F1 Driver: Lando Norris
roderick@RsLinux:~/scripts$ bash ~/scripts/lab4-script2.sh
Hello World
F1 Team: Mclaren
F1 Driver: Lando Norris
Position: P2
GrandPrix: UNited States
roderick@RsLinux:~/scripts$


Open
lab4-script3.sh
~/scripts
#!/bin/bash
echo "Today's date is:"
date
echo -n "The current user is:"
whoami
echo "Memory usage:"
free -h


1/1
Tilix: roderick@RsLinux: ~
1: roderick@RsLinux: ~
roderick@RsLinux:~$ bash ~/scripts/lab4-script3.sh
Today's date is:
Thu Oct 23 09:44:39 PM EDT 2025
roderick@RsLinux:~$ bash ~/scripts/lab4-script3.sh
Today's date is:
Thu Oct 23 09:46:29 PM EDT 2025
The current user is:roderick
roderick@RsLinux:~$ bash ~/scripts/lab4-script3.sh
Today's date is:
Thu Oct 23 09:47:29 PM EDT 2025
The current user is:roderick
Memory usage:
total used free shared buff/cache available
Mem: 3.8Gi 2.3Gi 400Mi 36Mi 1.4Gi 1.5Gi
Swap: 2.6Gi 12Ki 2.6Gi
roderick@RsLinux:~$

Challenge Question

Open challenge_lab4.sh ~/cis106/labs/lab4

```bash
#!/bin/bash

# Display system information with big words
figlet "System"
echo "DATE UTC: $(date)"
echo "HOSTNAME: $(hostname)"
echo "UPTIME: $(uptime -p)"
echo "USER: $USER"

# Memory Information
figlet "Memory"
free -h | grep -E 'Mem|Swap'

# Disk Information
figlet "Disk"
df -h | grep -E '^Filesystem|/dev/sda'
```

Tilix: roderick@RsLinux: ~

1: roderick@RsLinux: ~

```
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/ ___| _   _ ___| |_ ___ _ __ ___
\___ \| | | / __| __/ _ \ '_ ` _ \
 ___) | |_| \__ \ ||  __/ | | | | |
|____/ \__, |___/\__\___|_| |_| |_|
       |___/
DATE UTC: Thu Oct 23 10:03:46 PM EDT 2025
HOSTNAME: RsLinux
UPTIME: up 2 hours, 34 minutes
USER: roderick
 __  __
|  \/  | ___ _ __ ___   ___  _ __ _   _
| |\/| |/ _ \ '_ ` _ \ / _ \| '__| | | |
| |  | |  __/ | | | | | (_) | |  | |_| |
|_|  |_|\___|_| |_| |_|\___/|_|   \__, |
                                   |___/
Mem:           3.8Gi       2.5Gi       560Mi        40Mi       1.1Gi       1.3Gi
Swap:          2.6Gi       1.3Mi       2.6Gi
 ____  _     _
|  _ \(_)___| | __
| | | | / __| |/ /
| |_| | \__ \   <
|____/|_|___/_|\_\

Filesystem      Size  Used Avail Use% Mounted on
/dev/sda1        47G  9.8G   35G  23% /
roderick@RsLinux:~$
```