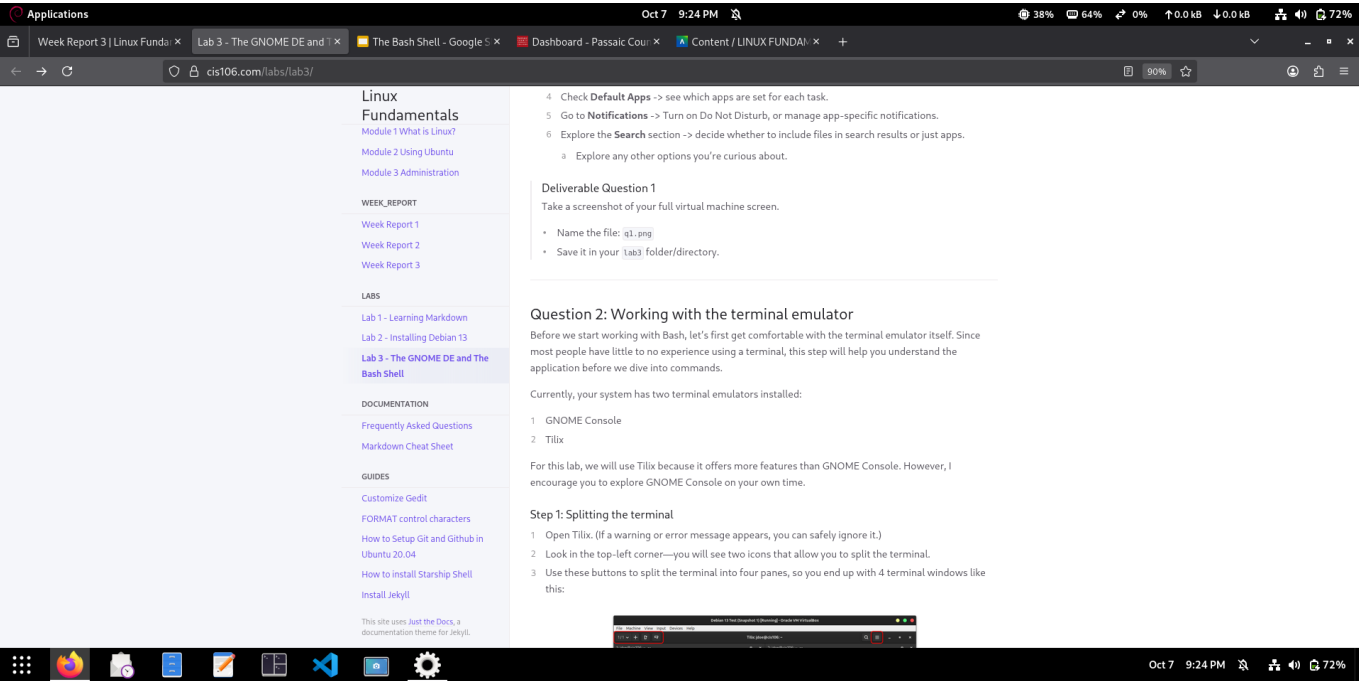
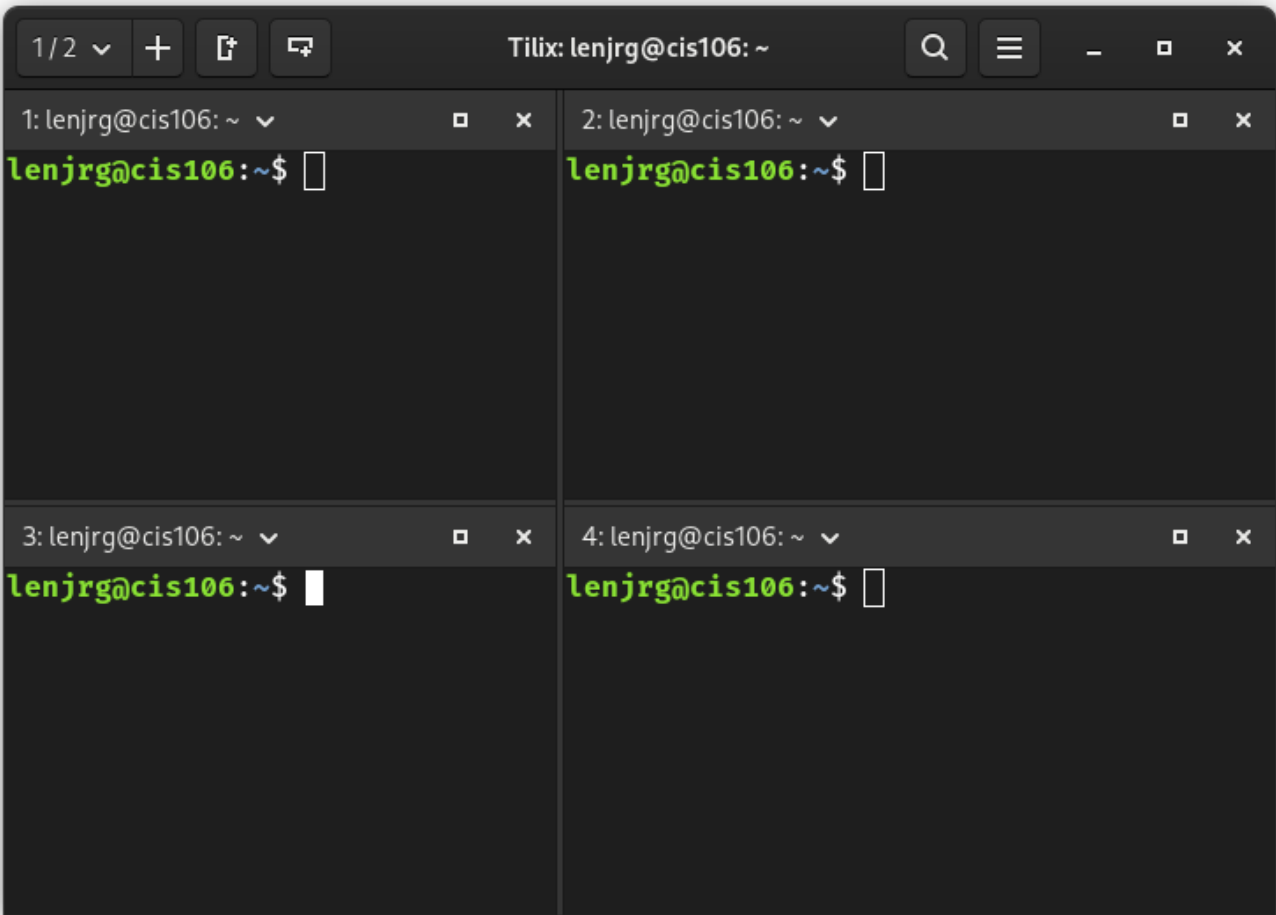


# Lab 3 Submission

## Question 1



## Question 2



## Question 3

```
1: lenjrg@cis106: ~  
lenjrg@cis106:~$ echo -n  
lenjrg@cis106:~$ echo -n "hello"  
hellolenjrg@cis106:~$ echo -e \t "hello"  
t hello  
lenjrg@cis106:~$ echo -e \\t "hello"  
hello  
lenjrg@cis106:~$ echo -e "First Line.\nSecond Line."  
First Line.  
Second Line.  
lenjrg@cis106:~$ echo -e "One line\n\\Same Line"  
One line  
\\Same Line  
lenjrg@cis106:~$ echo -e "One line\n\\tSame Line"  
One line  
    Same Line  
lenjrg@cis106:~$ echo -e "One line\n\\tSame Line"  
One line  
    Same Line  
lenjrg@cis106:~$ echo -e \t"One line\nSecond line"  
tOne line  
Second line  
lenjrg@cis106:~$ echo -e "\tone line\nsecond line"  
one line  
second line  
lenjrg@cis106:~$  
2: lenjrg@cis106: ~  
If -e is in effect, the following sequences are recognized:  
  
\\      backslash  
\\a      alert (BEL)  
\\b      backspace  
\\c      produce no further output  
\\e      escape  
\\f      form feed  
\\n      new line  
\\r      carriage return  
\\t      horizontal tab  
\\v      vertical tab  
\\0NNN   byte with octal value  
         NNN (1 to 3 digits)  
  
\\xHH     byte with hexadecimal  
         value HH (1 to 2 digits)  
(1) line 32/108 49% (press h for help or q to quit)
```

## Challenge Question

```

1/1 v + [ ] [ ]
Tilix: lenjrg@cis106: ~
1: lenjrg@cis106: ~
lenjrg@cis106:~$ free -h
              total        used        free      s
hared  buff/cache  available
Mem:    3.8Gi      2.3Gi      307Mi
101Mi   1.5Gi      1.5Gi
Swap:   2.1Gi          0B      2.1Gi
lenjrg@cis106:~$

2: lenjrg@cis106: ~
kilobytes. Implies --si.

--mega Display the amount of memory in
megabytes. Implies --si.

--giga Display the amount of memory in gi-
gabytes. Implies --si.

--tera Display the amount of memory in ter-
abytes. Implies --si.

--peta Display the amount of memory in
petabytes. Implies --si.

-h, --human
Show all output fields automatically
scaled to shortest three digit unit
and display the units of print out.
Following units are used.

      B = bytes
      Ki = kibibyte
      Mi = mebibyte
      Gi = gibibyte
      Ti = tebibyte
      Pi = pebibyte

If unit is missing, and you have
exbibyte of RAM or swap, the number
age free(1) line 82 (press h for help or q to quit)

```

```

1/1 v + [ ] [ ]
Tilix: lenjrg@cis106: ~
1: lenjrg@cis106: ~
lenjrg@cis106:~$ uname -a
Linux cis106 6.12.48+deb13-amd64 #1 SMP PREEMPT_DYN
AMIC Debian 6.12.48-1 (2025-09-20) x86_64 GNU/Linux
lenjrg@cis106:~$

2: lenjrg@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 fol-
    lowing order, except 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

me(1) line 1/77 35% (press h for help or q to quit)

```

```
Tilix: lenjrg@cis106: ~  
1: lenjrg@cis106: ~  
lenjrg@cis106:~$ date ---rfc-3339=date  
date: unrecognized option '--rfc-3339=date'  
Try 'date --help' for more information.  
lenjrg@cis106:~$ date---rfc-3339=date  
bash: date---rfc-3339=date: command not found  
lenjrg@cis106:~$ date --rfc-3339=date  
date: unrecognized option '--rfc-3339=date'  
Try 'date --help' for more information.  
lenjrg@cis106:~$ date ---rfc-3339=seconds  
date: unrecognized option '--rfc-3339=seconds'  
Try 'date --help' for more information.  
lenjrg@cis106:~$ date --rfc-3339=time  
date: invalid argument 'time' for '--rfc-3339'  
Valid arguments are:  
  - 'date'  
  - 'seconds'  
  - 'ns'  
Try 'date --help' for more information.  
lenjrg@cis106:~$ date --rfc-3339='date'  
2025-10-08  
lenjrg@cis106:~$ date --rfc-3339='time'  
date: invalid argument 'time' for '--rfc-3339'  
Valid arguments are:  
  - 'date'  
  - 'seconds'  
  - 'ns'  
Try 'date --help' for more information.  
lenjrg@cis106:~$ date --rfc-3339='seconds'  
2025-10-08 21:31:02-04:00  
lenjrg@cis106:~$ █  
  
2: lenjrg@cis106: ~  
--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 precision. Example: 2006-08-14T02:34:56-06:00  
  
--resolution  
output the available resolution of timestamps Example: 0.000000001  
  
-R, --rfc-email  
output date and time in RFC 5322 format. Example: Mon, 14 Aug 2006 02:34:56 -0600  
  
--rfc-3339=FMT  
output date/time in RFC 3339 format. FMT='date', 'seconds', or 'ns' for date and time to the indicated precision. Example: 2006-08-14 02:34:56-06:00  
  
-r, --reference=FILE  
display the last modification time of FILE  
  
-s, --set=STRING  
set time described by STRING  
  
-u, --utc, --universal  
print or set Coordinated Universal Time  
Manual page date(1) line 31 (press h for help or q to quit)
```