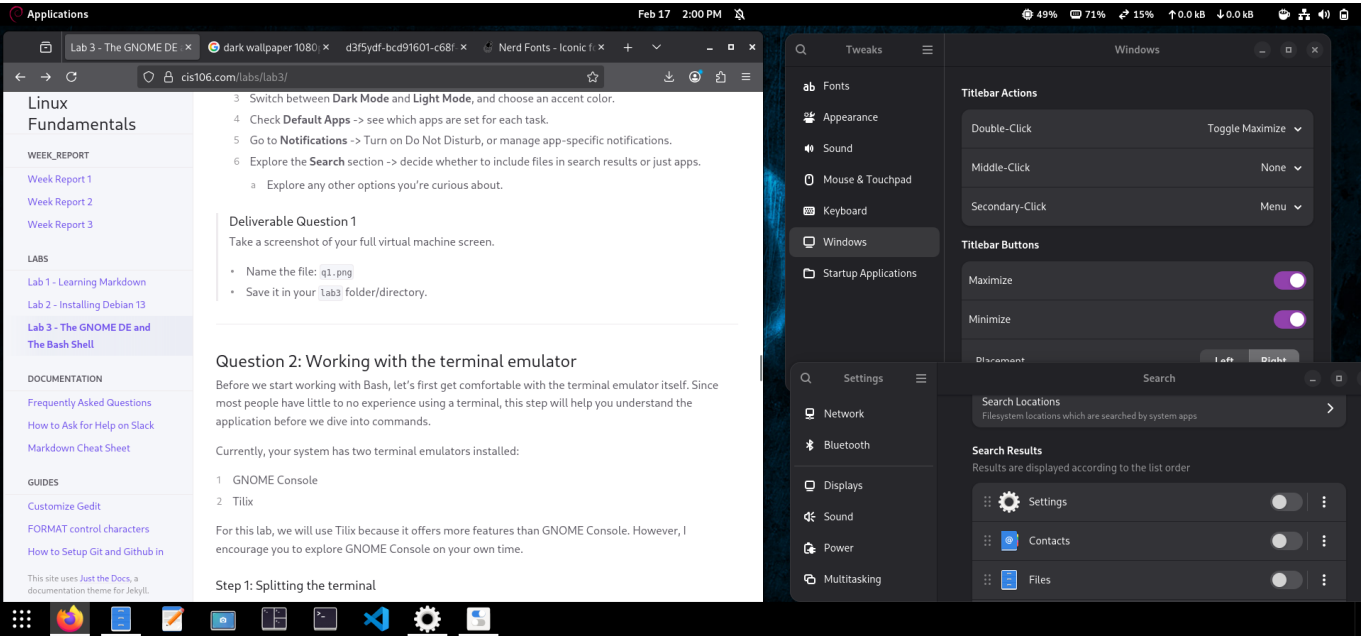
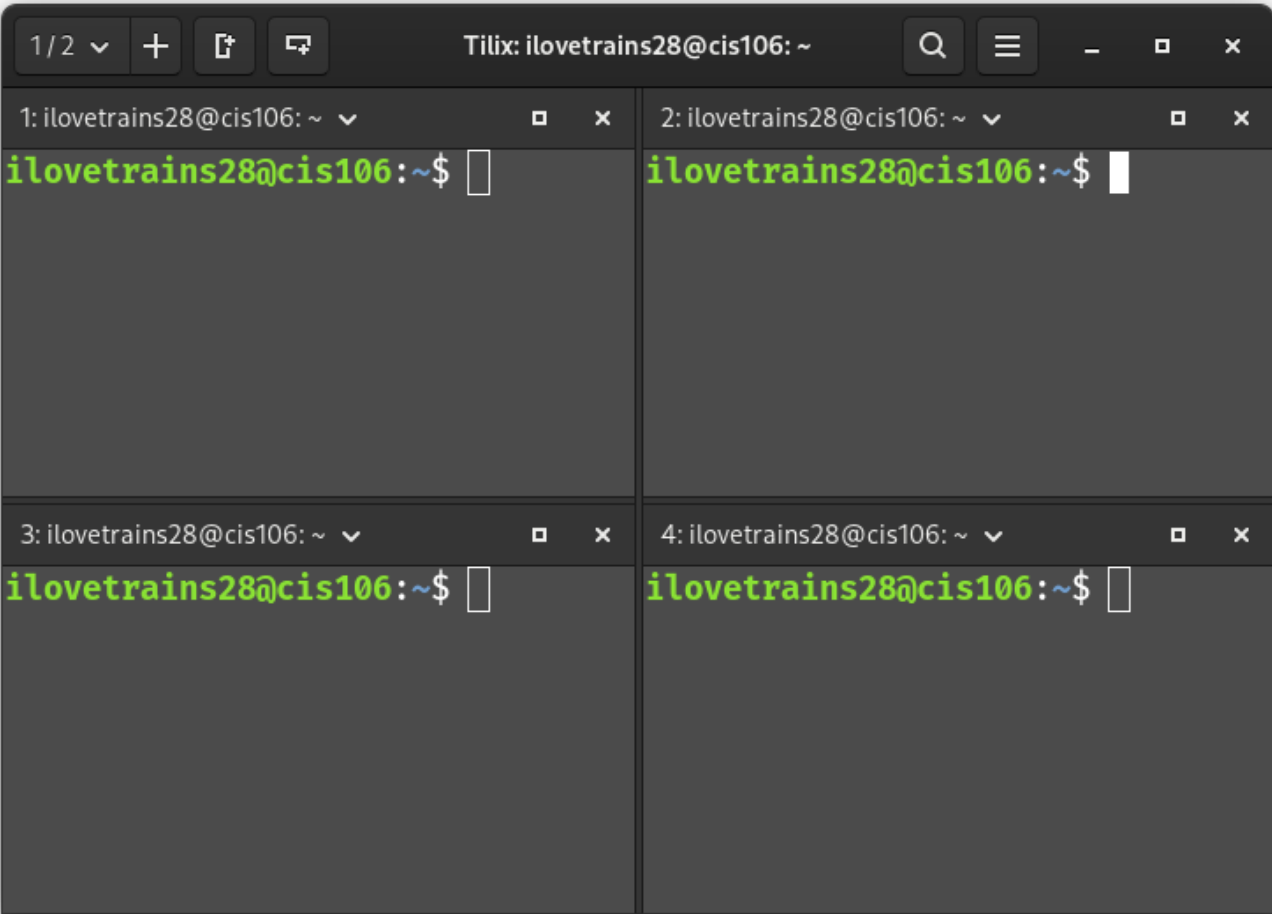


Lab 3 Submission

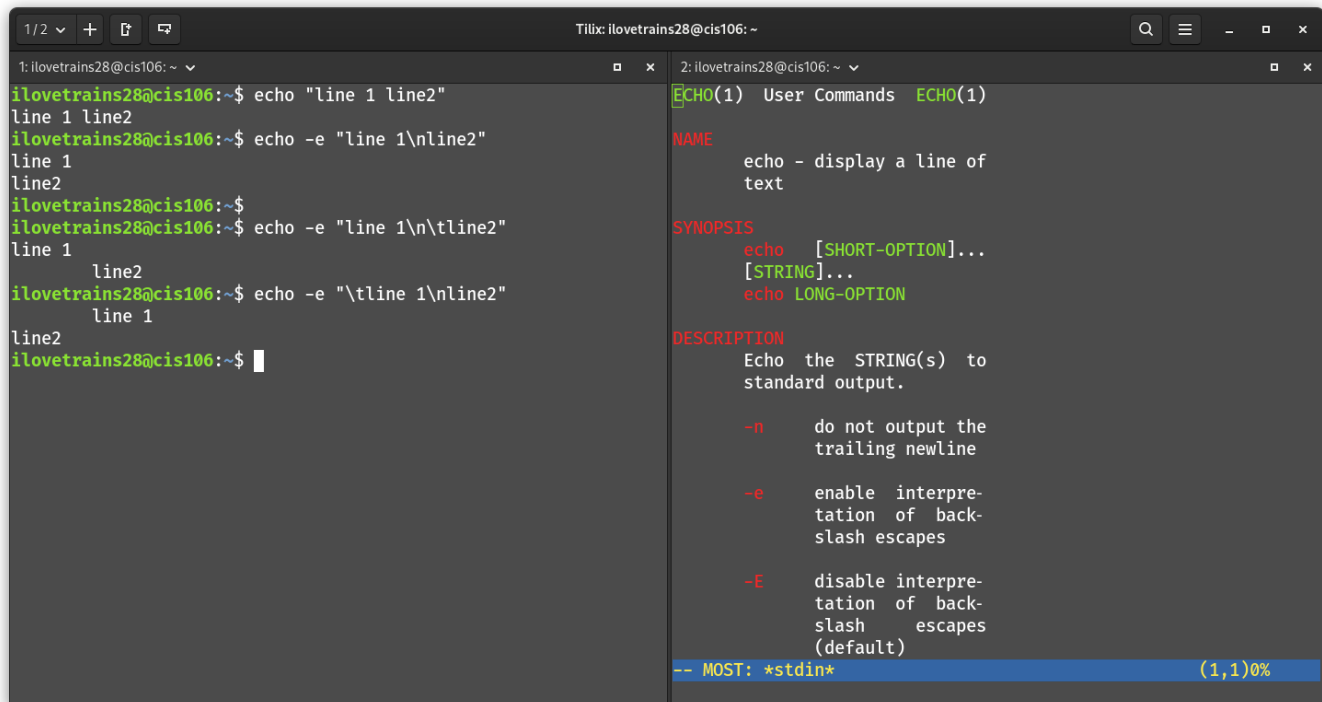
Question 1



Question 2



Question 3



```
1: ilovetrains28@cis106: ~  
ilovetrains28@cis106:~$ echo "line 1 line2"  
line 1 line2  
ilovetrains28@cis106:~$ echo -e "line 1\nline2"  
line 1  
line2  
ilovetrains28@cis106:~$  
ilovetrains28@cis106:~$ echo -e "line 1\n\tline2"  
line 1  
    line2  
ilovetrains28@cis106:~$ echo -e "\tline 1\nline2"  
    line 1  
line2  
ilovetrains28@cis106:~$
```

2: ilovetrains28@cis106: ~
ECHO(1) User Commands ECHO(1)

NAME
 echo - display a line of text

SYNOPSIS
 echo [SHORT-OPTION]... [STRING]...
 echo LONG-OPTION

DESCRIPTION
 Echo the STRING(s) to standard output.

 -n do not output the trailing newline

 -e enable interpretation of backslash escapes

 -E disable interpretation of backslash escapes (default)

-- MOST: *stdin* (1,1)0%

Challenge Question

```

1: ilovetrains28@cis106: ~
ilovetrains28@cis106:~$ free
              total        used        free      shared  buff/cache   available
Mem:           4016016      2324276         361148        285484        1873888        1691740
Swap:          2715644         38884        2676760
ilovetrains28@cis106:~$ free -h -L
              37Mi CacheUse      1.8Gi MemUse      2.2Gi MemFree      354Mi
SwapUse
ilovetrains28@cis106:~$

2: ilovetrains28@cis106: ~
--pretty 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. Follow-
ing 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 is in
tebibytes and columns might not be
aligned with header.

-w, --wide
Switch to the wide mode. The wide mode
produces lines longer than 80 characters.
In this mode --buffers and --cache are re-
ported in two separate columns.

-c, --count count
Display the result count times. Requires
the -s option.

-l, --lohi
Show detailed low and high memory statis-
tics.

-L, --line
Show output on a single line, often used
with the -s option to show memory statis-
tics.

--MOST: *stdin* (89,1)52%
Press 'Q' to quit, 'H' for help, and SPACE to scroll.

```

```

1: ilovetrains28@cis106: ~
ilovetrains28@cis106:~$ uname
Linux
ilovetrains28@cis106:~$ uname -s -r -v -o
Linux 6.12.63-deb13-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.12.63-1 (2025-12-30) GNU/Linux
ilovetrains28@cis106:~$

2: ilovetrains28@cis106: ~
NAME(1) User Commands
NAME
uname - print system information

SYNOPSIS
uname [OPTION]...

DESCRIPTION
Print certain system information. With no OPTION, same as -a.

-h, --all
print all information, in the following order, except omit -p and -i if unknown:

-i, --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

-m, --machine
print the machine hardware name

-p, --processor
print the processor type (non-portable)

-i, --hardware-platform
print the hardware platform (non-portable)

-o, --operating-system
print the operating system

--MOST: *stdin* (1,1)0%
Press 'Q' to quit, 'H' for help, and SPACE to scroll.

```

```

1: ilovetrains28@cis106: ~
ilovetrains28@cis106:~$ date --rfc-3339=ns
2026-02-20 08:22:27.094222916-05:00
ilovetrains28@cis106:~$

2: ilovetrains28@cis106: ~
--debug
annotate the parsed date, and warn about questionable usage to stderr

-f, --file=DATEFILE
like --date; once for each line of DATEFILE

-i[fmt], --iso-8601[=fmt]
output date/time in ISO 8601 format. FMT='date' for date only (the default), 'hours', 'minutes', 'sec-
onds', 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

-m, --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

-F, --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 (UTC)

--help display this help and exit

--version
output version information and exit

All options that specify the date to display are mutually exclusive. I.e.: --date, --file, --reference, --res-
olution.

--MOST: *stdin* (17,1)10%
Press 'Q' to quit, 'H' for help, and SPACE to scroll.

```