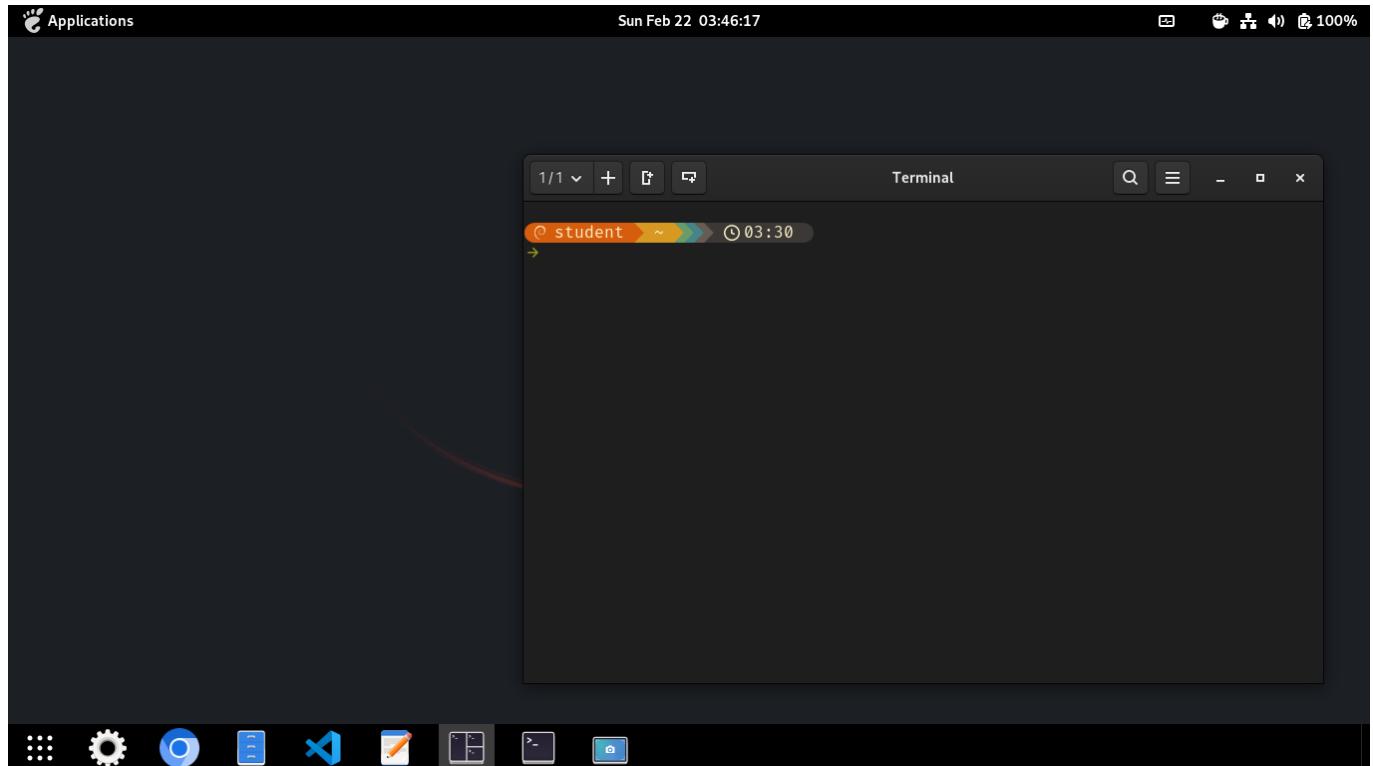
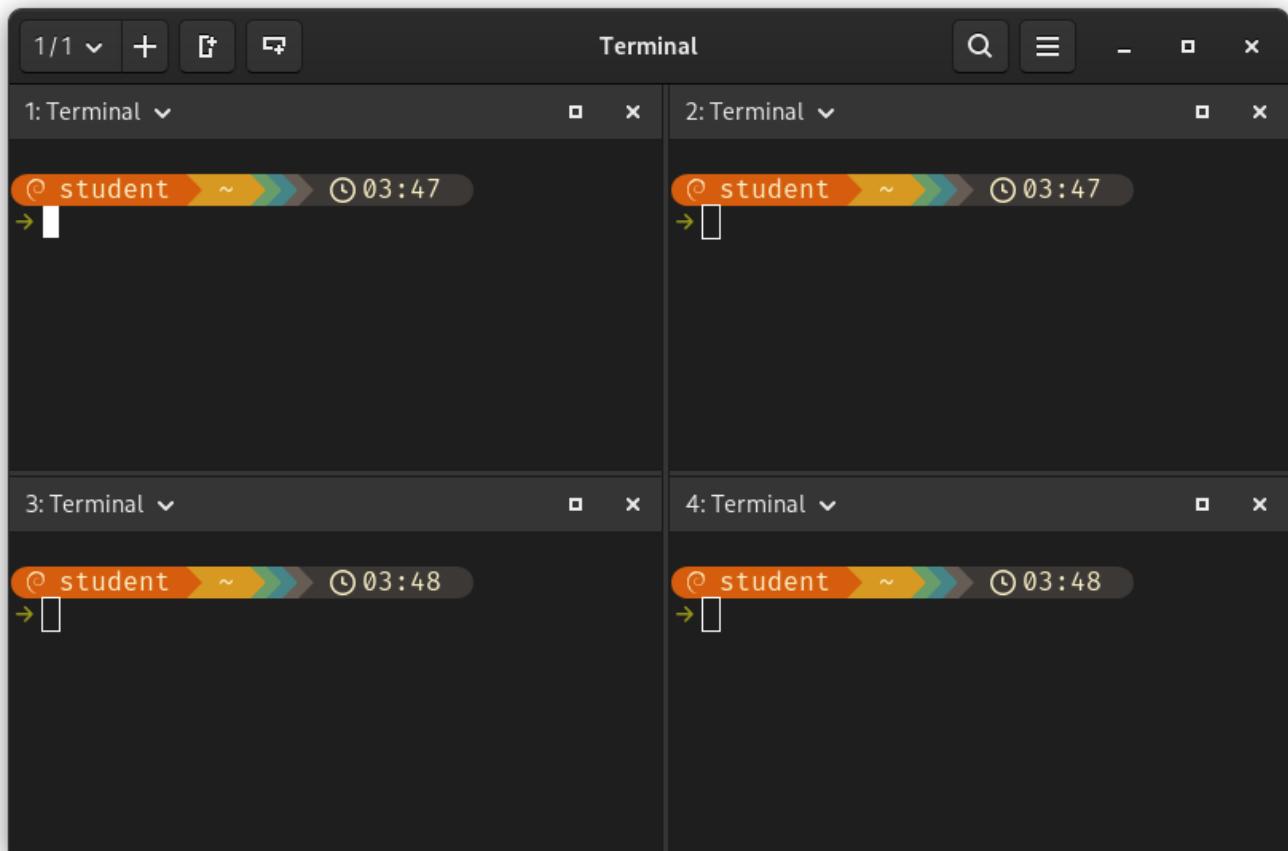


Lab 3 Submission

Question 1



Question 2



Question 3

```
student@Echo2:~$ echo "Hello world"
Hello world
student@Echo2:~$ echo -n "Hello world"
Hello world
student@Echo2:~$ echo -e "\tHello \tworld"
    Hello world
student@Echo2:~$ echo "line 1 line2"
line 1 line2
student@Echo2:~$ echo -e "line 1\nline 2"
line 1
line 2
student@Echo2:~$ echo -e "line 1\n\t line 2"
line 1
    line 2
student@Echo2:~$ echo -e "\t line 1\nline 2"
    line 1
line 2
student@Echo2:~$ 
```

ECHO(1) User Commands ECHO(1)

NAME
echo - display a line of text

SYNOPSIS
echo [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)
--help display this help and exit
--version

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

Challenge Question

student@Echo2:~

```
--giga      show output in gigabytes
--tera      show output in terabytes
--peta      show output in petabytes
-k, --kibi   show output in kibibytes
-m, --mebi   show output in mebibytes
-g, --gibi   show output in gibibytes
--tebi     show output in tebibytes
--pebi     show output in pebibytes
-h, --human  show human-readable output
--si       use powers of 1000 not 1024
-l, --lohi   show detailed low and high memory statistics
-L, --line   show output on a single line
-t, --total  show total for RAM + swap
-v, --committed show committed memory and commit limit
-s N, --seconds N repeat printing every N seconds
-c N, --count N repeat printing N times, then exit
-w, --wide   wide output

--help      display this help and exit
-V, --version output version information and exit

For more details see free(1).
student@Echo2:~$ free -h --total
              total        used        free      shared  buff/cache available
Mem:       1.9Gi       1.3Gi      189Mi       62Mi      694Mi
Swap:      1.3Gi      181Mi      1.1Gi
Total:    3.3Gi      1.5Gi      1.3Gi
student@Echo2:~$
```

student@Echo2:~

```
student@Echo2:~$ uname -a
Linux Echo2 6.12.73+deb13-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.12.7
3-1 (2026-02-17) x86_64 GNU/Linux
student@Echo2:~$ uname -s
Linux
student@Echo2:~$ uname -r
6.12.73+deb13-amd64
student@Echo2:~$ uname -v
#1 SMP PREEMPT_DYNAMIC Debian 6.12.73-1 (2026-02-17)
student@Echo2:~$ uname -o
GNU/Linux
student@Echo2:~$ uname -s -r -v -o
Linux 6.12.73+deb13-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.12.73-1 (2
026-02-17) GNU/Linux
student@Echo2:~$
```

student@Echo2:~

```
-L, --line      Show output on a single line, often used with
                  the -s option to show
                  memory statistics re-
                  peatedly.

-s, --seconds delay
                  Continuously display the
                  result delay seconds
                  apart. You may actually
                  specify any floating
                  point number for delay
                  using either . or , for
                  decimal
                  point.
                  usleep(3) is used for
                  microsecond resolution
                  delay times.

--si      Use kilo, mega, giga etc
                  (power of 1000) instead
                  of kibi, mebi, gibi
                  (power of 1024).

-t, --total
                  Display a line showing
                  the column totals.

-- MOST: *stdin* (158,2)71%
Press 'Q' to quit, 'H' for help, and SPACE to scroll.
```

student@Echo2:~

```
-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

--help      display this help and exit

--version
                  output version information and exit

AUTHOR
Written by David MacKenzie.

-- MOST: *stdin* (20,1)24%
Press 'Q' to quit, 'H' for help, and SPACE to scroll.
```

```
1: student@Echo2: ~
student@Echo2:~$ date --rfc-3339
date: option '--rfc-3339' requires an argument
Try 'date --help' for more information.
student@Echo2:~$ date --rfc-3339=2025-09-10 18:39:53.467197335-04:00
date: invalid argument '2025-09-10' for '--rfc-3339'
Valid arguments are:
- 'date'
- 'seconds'
- 'ns'
Try 'date --help' for more information.
student@Echo2:~$ date --rfc-3339=FMT
date: invalid argument 'FMT' for '--rfc-3339'
Valid arguments are:
- 'date'
- 'seconds'
- 'ns'
Try 'date --help' for more information.
student@Echo2:~$ date --rfc-3339=date
2026-02-22
student@Echo2:~$ date --rfc-3339=ns
2026-02-22 04:43:44.962878219-05:00
student@Echo2:~$
```

```
2: student@Echo2: ~
--resolution
    output the available resolution of timestamps Example:
    0.00000001

--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 (UTC)

--help
    display this help and exit

--version
    output version information and exit

-- MOST: *stdin* (32,1)17%
Press 'Q' to quit, 'H' for help, and SPACE to scroll.
```