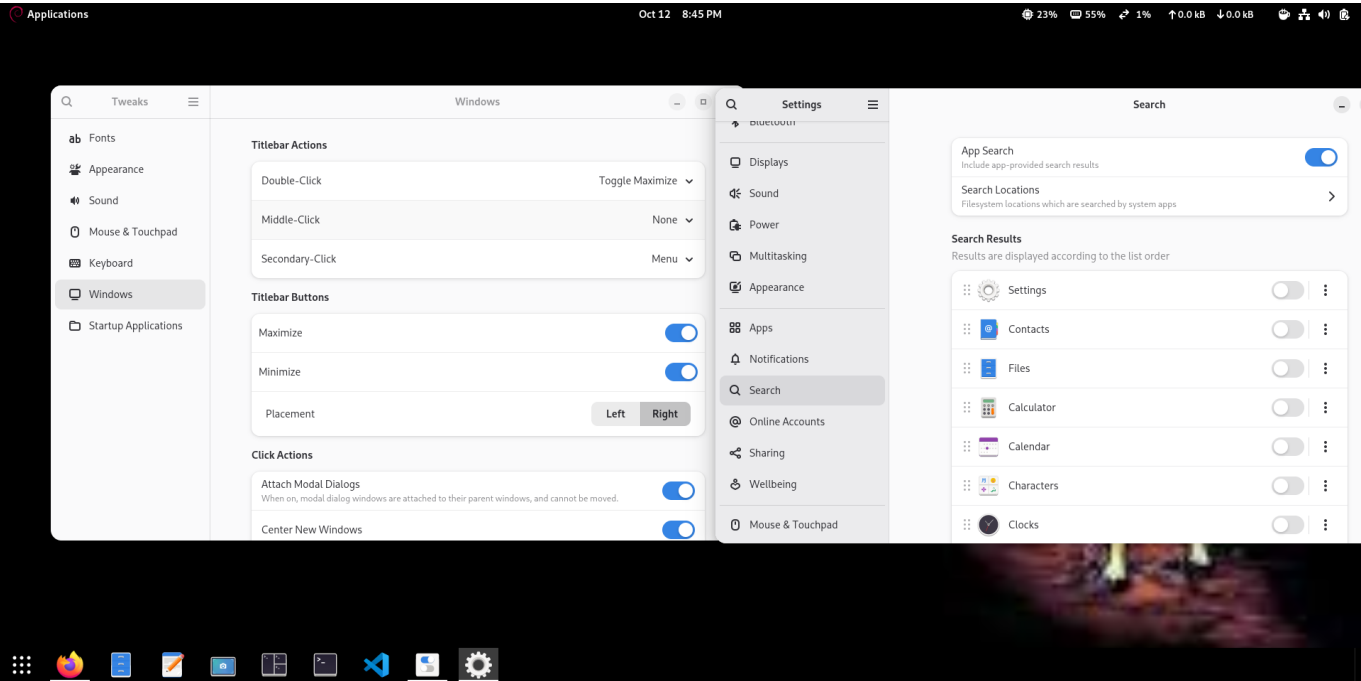
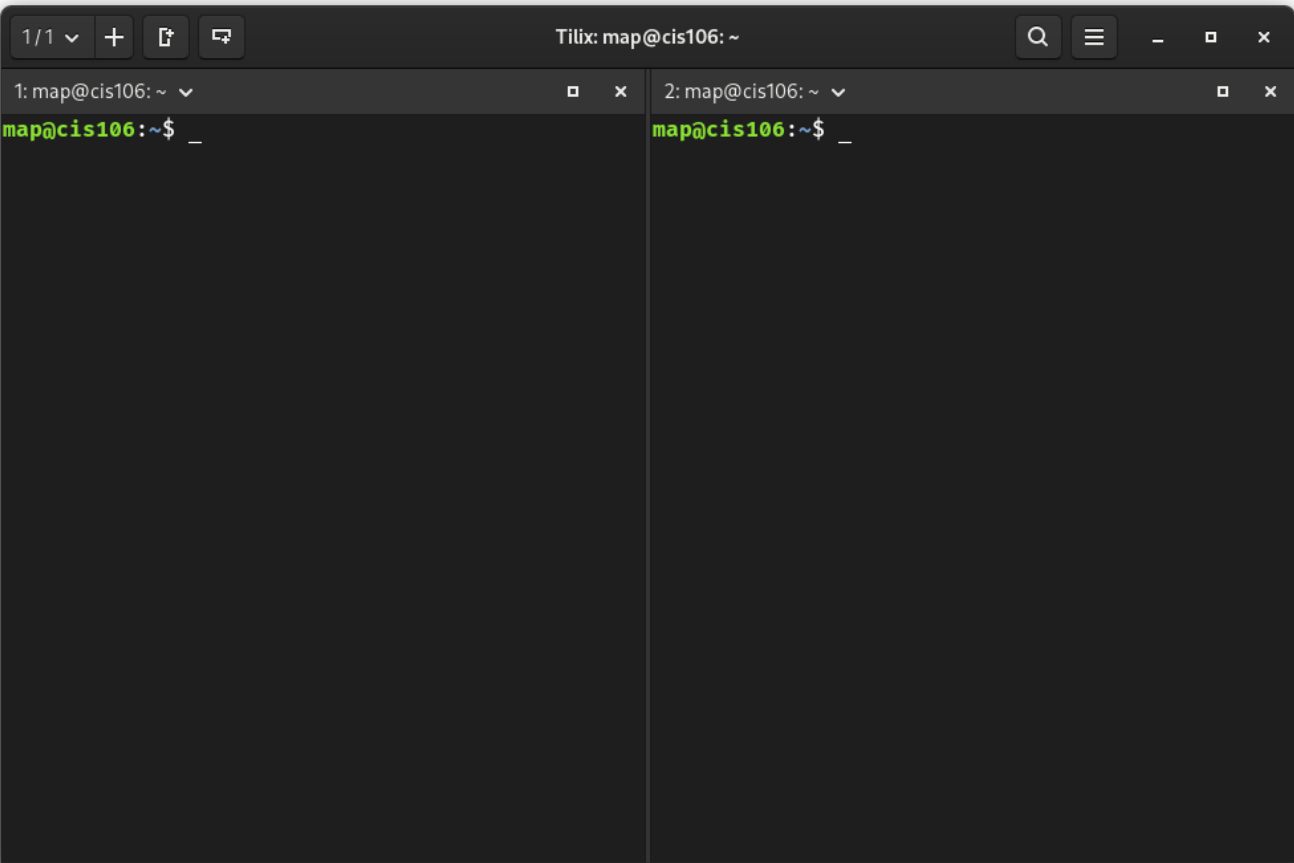


Lab 3 Submission

Question 1



Question 2



Question 3

The screenshot shows a Tilix terminal window with two panes. The left pane shows a series of shell commands and their outputs, demonstrating the use of the `-e` option with `echo` to handle escape sequences. The right pane displays a list of recognized escape sequences and their meanings.

Terminal Output (Left Pane):

```
map@cis106:~$ echo "Hello World"
Hello World
map@cis106:~$ echo -n "hello world"
hello worldmap@cis106:~$ echo -e "\tHello\tWorld"
      Hello      Worrlld
map@cis106:~$ echo "line1 line2"
line1 line2
map@cis106:~$ echo -e "line 1\nline2"
line 1
line2
map@cis106:~$ echo -e "line 1\n\tline2"
line 1
      line2
map@cis106:~$ echo -e "\tline 1\nline2"
      line 1
line2
map@cis106:~$ _
```

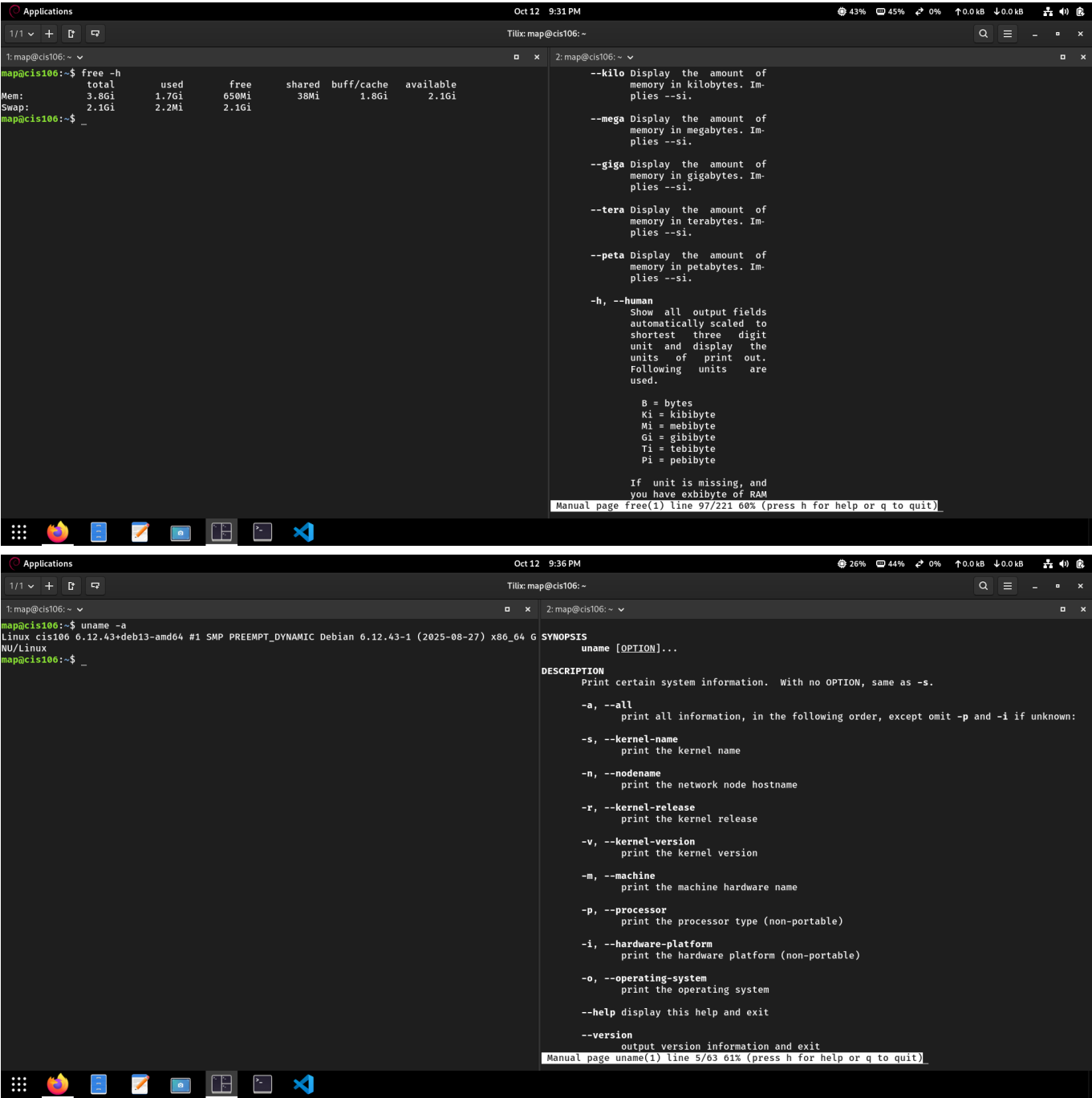
Escape Sequences (Right Pane):

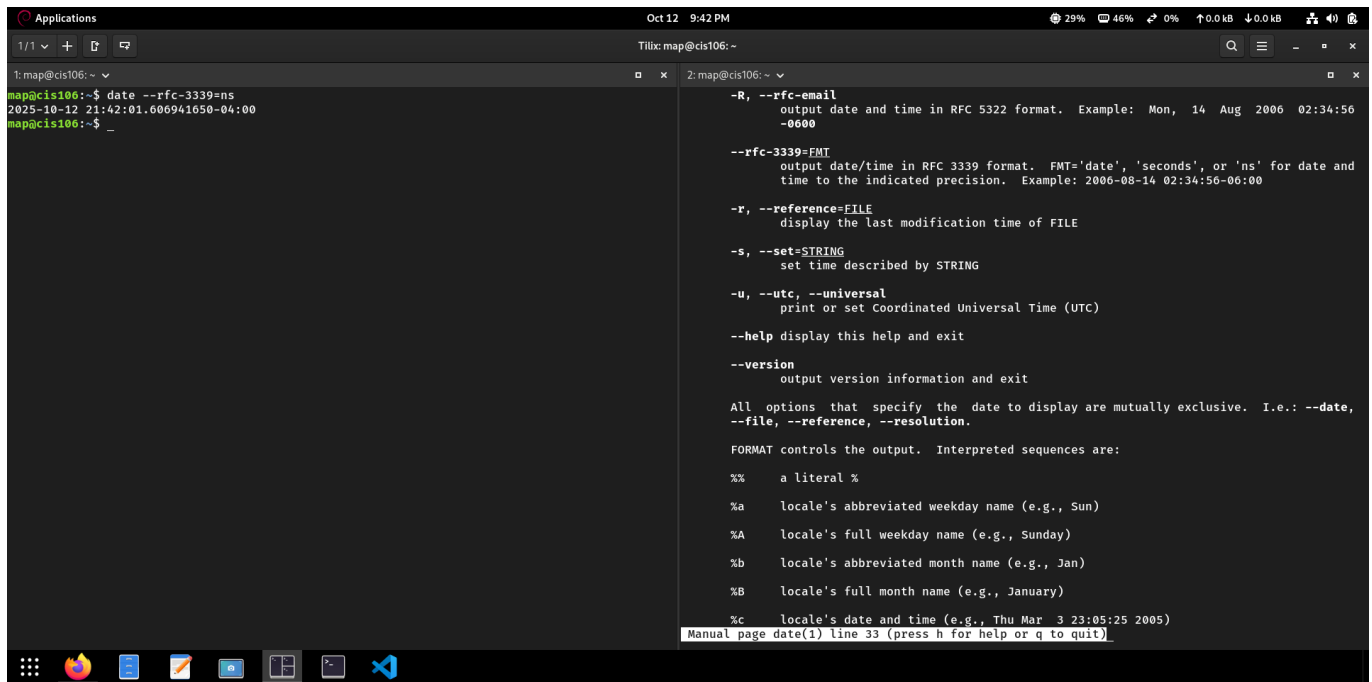
If `-e` is in effect, the following sequences are recognized:

<code>\\</code>	backslash
<code>\a</code>	alert (BEL)
<code>\b</code>	backspace
<code>\c</code>	produce no further output
<code>\e</code>	escape
<code>\f</code>	form feed
<code>\n</code>	new line
<code>\r</code>	carriage return
<code>\t</code>	horizontal tab
<code>\v</code>	vertical tab
<code>\0NNN</code>	byte with octal value NNN (1 to 3 digits)
<code>\xHH</code>	byte with hexadecimal value HH (1 to 2 digits)

line 28/97 47% (press h for help or q to quit)

Challenge Question





```
Applications Oct12 9:42 PM 29% 46% 0% 0.0kB 0.0kB
1/1 + T T
Tilix: map@cis106: ~
T: map@cis106: ~
map@cis106:~$ date --rfc-3339=ns
2025-10-12 21:42:01.606941650-04:00
map@cis106:~$ _
Z: map@cis106: ~
-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

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

FORMAT controls the output. Interpreted sequences are:

%%      a literal %
%a      locale's abbreviated weekday name (e.g., Sun)
%A      locale's full weekday name (e.g., Sunday)
%b      locale's abbreviated month name (e.g., Jan)
%B      locale's full month name (e.g., January)
%c      locale's date and time (e.g., Thu Mar 3 23:05:25 2005)
Manual page date(1) line 33 (press h for help or q to quit)
```