

Introduction to emacs

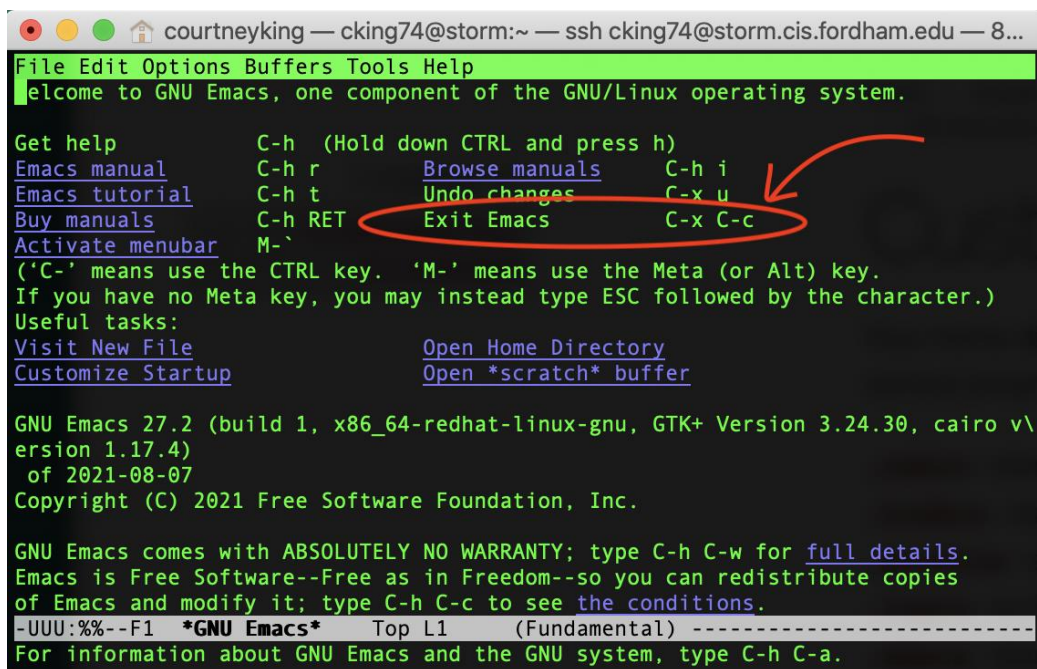
Emacs is a powerful program which provides many useful tools that can be accessed directly from the terminal window of a local or remote machine. This tutorial will focus on the basics of the program, including how to open, edit and close a document using it via the command-line.

Step 1: If you wish to use the program on your own computer, you can easily do so after following the installation steps shown here:

- <https://www.gnu.org/software/emacs/download.html>

Since emacs is already installed on the storm server, for the following examples I have remained logged on to it as described in the previous tutorials [How to: remote login from MAC](#) or [How To: remote login using MobaXterm \(Windows\)](#) and begin at the command-line prompt.

Step 2: To start, let's display some basic information about the program by typing **emacs** into the terminal and pressing **enter**. After reading, this screen can be exited by pressing **[ctrl-x] [ctrl-c]** as shown in the guide.



```
courtneyking — cking74@storm:~ — ssh cking74@storm.cis.fordham.edu — 8...
File Edit Options Buffers Tools Help
Welcome to GNU Emacs, one component of the GNU/Linux operating system.

Get help          C-h (Hold down CTRL and press h)
Emacs manual      C-h r      Browse manuals    C-h i
Emacs tutorial    C-h t      Undo changes      C-x u
Buy manuals       C-h RET    Exit Emacs        C-x C-c
Activate menubar M-`

('C-' means use the CTRL key. 'M-' means use the Meta (or Alt) key.
If you have no Meta key, you may instead type ESC followed by the character.)
Useful tasks:
Visit New File    Open Home Directory
Customize Startup Open *scratch* buffer

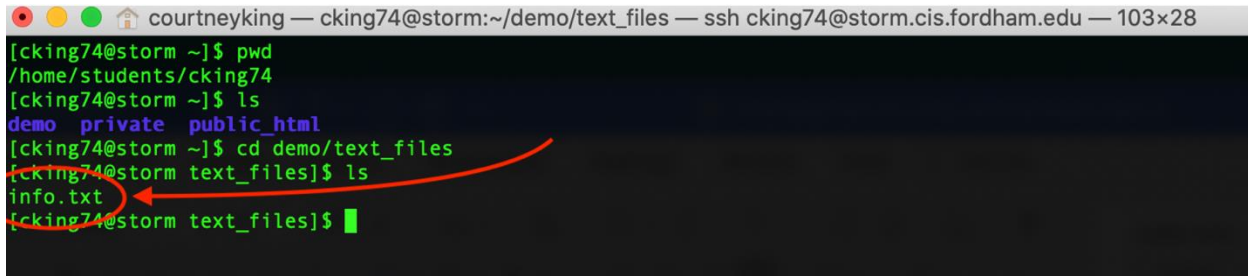
GNU Emacs 27.2 (build 1, x86_64-redhat-linux-gnu, GTK+ Version 3.24.30, cairo v\
ersion 1.17.4)
of 2021-08-07
Copyright (C) 2021 Free Software Foundation, Inc.

GNU Emacs comes with ABSOLUTELY NO WARRANTY; type C-h C-w for full details.
Emacs is Free Software--Free as in Freedom--so you can redistribute copies
of Emacs and modify it; type C-h C-c to see the conditions.
-UUU:%%--F1 *GNU Emacs* Top L1 (Fundamental) -----
For information about GNU Emacs and the GNU system, type C-h C-a.
```

Step 3: First **locate the file** you wish to open with emacs.

It may be helpful to know the **cd** (change directory), **pwd** (print working directory) and **ls** (list contents) commands for this step or to be familiar with the concept of absolute and relative paths. They are explained in the tutorial [Introduction to Linux](#).

Here, I begin in the directory of my account on the remote machine `/home/students/cking74` and navigate to a folder I previously created named “text_files” which holds the file I wish to open with emacs, “info.txt”

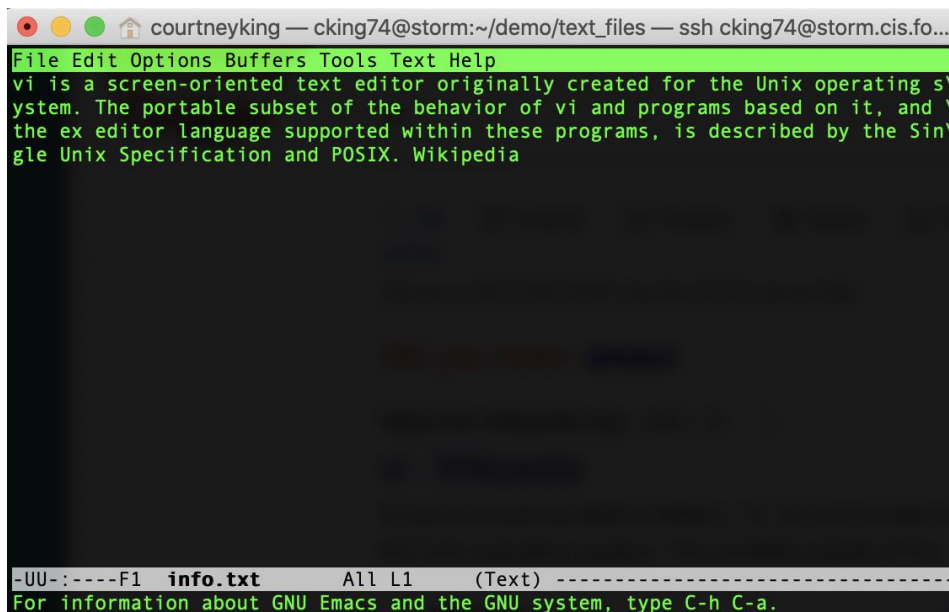


```
courtneyking — cking74@storm:~/demo/text_files — ssh cking74@storm.cis.fordham.edu — 103x28
[cking74@storm ~]$ pwd
/home/students/cking74
[cking74@storm ~]$ ls
demo private public html
[cking74@storm ~]$ cd demo/text_files
[cking74@storm text_files]$ ls
info.txt
[cking74@storm text_files]$
```

Of course if you already know the full location of the file and don’t want to go through the navigation steps, you could just prepend it to the file name. This means I could reference the file from a different location on the machine as “`/home/students/cking74/demo/text_files/info.txt`” rather than just “info.txt” in the following steps.

Step 4: You can **open the file** by simply typing **emacs** followed by the file name into the terminal and pressing **enter**. Here I open the file “info.txt” with the following command:

```
emacs info.txt
```

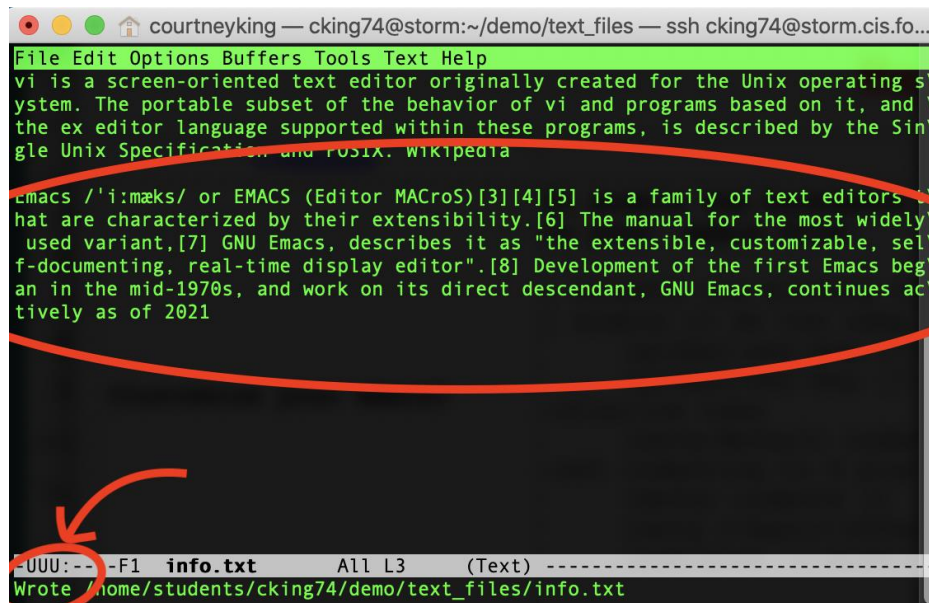


```
courtneyking — cking74@storm:~/demo/text_files — ssh cking74@storm.cis.fo...
File Edit Options Buffers Tools Text Help
vi is a screen-oriented text editor originally created for the Unix operating s\
ystem. The portable subset of the behavior of vi and programs based on it, and \
the ex editor language supported within these programs, is described by the Sin\
gle Unix Specification and POSIX. Wikipedia
-----
-UU-:----F1 info.txt All L1 (Text) -----
For information about GNU Emacs and the GNU system, type C-h C-a.
```

After running this command, we can see the contents of “info.txt” displayed in the window, which contains the information about another popular text-editing tool, vi.

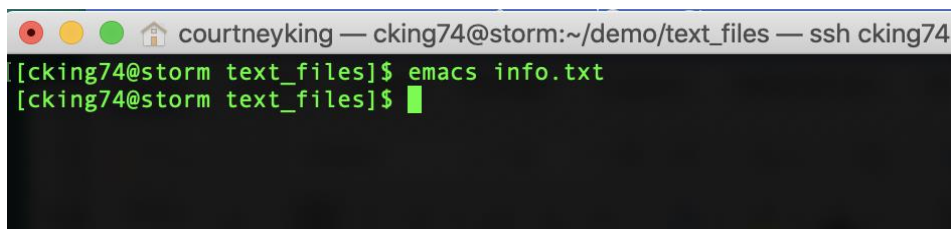
Step 4: If you only want to view the file, you can simply **close the document** by pressing **[ctrl-x] [ctrl-c]** although the example will continue on to write some information to “info.txt” in the following step.

Step 5: When you open a file with emacs, you already have the ability to **edit the document** using the keyboard. Here, I’ve copied some information about emacs from Wikipedia to “info.txt” and have **saved it** by pressing **[ctrl-x] [ctrl-s]**. After this, the system lets me know that the changes have been written to the document in the bottom left corner of the window as shown below.



```
courtneyking — cking74@storm:~/demo/text_files — ssh cking74@storm.cis.fo...
File Edit Options Buffers Tools Text Help
vi is a screen-oriented text editor originally created for the Unix operating s\
system. The portable subset of the behavior of vi and programs based on it, and \
the ex editor language supported within these programs, is described by the Sin\
gle Unix Specification and POSIX. WIKIPEDIA
Emacs /'i:mæks/ or EMACS (Editor MACroS)[3][4][5] is a family of text editors \
that are characterized by their extensibility.[6] The manual for the most widely\
used variant,[7] GNU Emacs, describes it as "the extensible, customizable, sel\
f-documenting, real-time display editor".[8] Development of the first Emacs beg\
an in the mid-1970s, and work on its direct descendant, GNU Emacs, continues ac\
tively as of 2021
-UUU:-- -F1 info.txt All L3 (Text) -----
Wrote /home/students/cking74/demo/text_files/info.txt
```

And then the document can simply be **closed** with **[ctrl-x] [ctrl-c]** as previously shown, returning you to the command-line prompt.



```
courtneyking — cking74@storm:~/demo/text_files — ssh cking74
[cking74@storm text_files]$ emacs info.txt
[cking74@storm text_files]$
```

If you write to the document and don’t wish to save change the changes, just close it with **[ctrl-x] [ctrl-c]**. Emacs may prompt you with a similar message to the one shown below to confirm your choice before discarding the changes.

```
-UU-: **--F1 info.txt All L1 (Text) -----  
Save file /home/students/cking74/demo/text_files/info.txt? (y, n, !, ., q, C-r, \  
C-f, d or C-h) █
```

Step 6: Emacs is an extensive program with much to learn. For more information about the program and its capabilities, please review the following guides:

- <https://www2.hawaii.edu/~walbritt/ics211/materials/emacs.htm> (basic)
- <https://www.gnu.org/software/emacs/tour/> (extended)