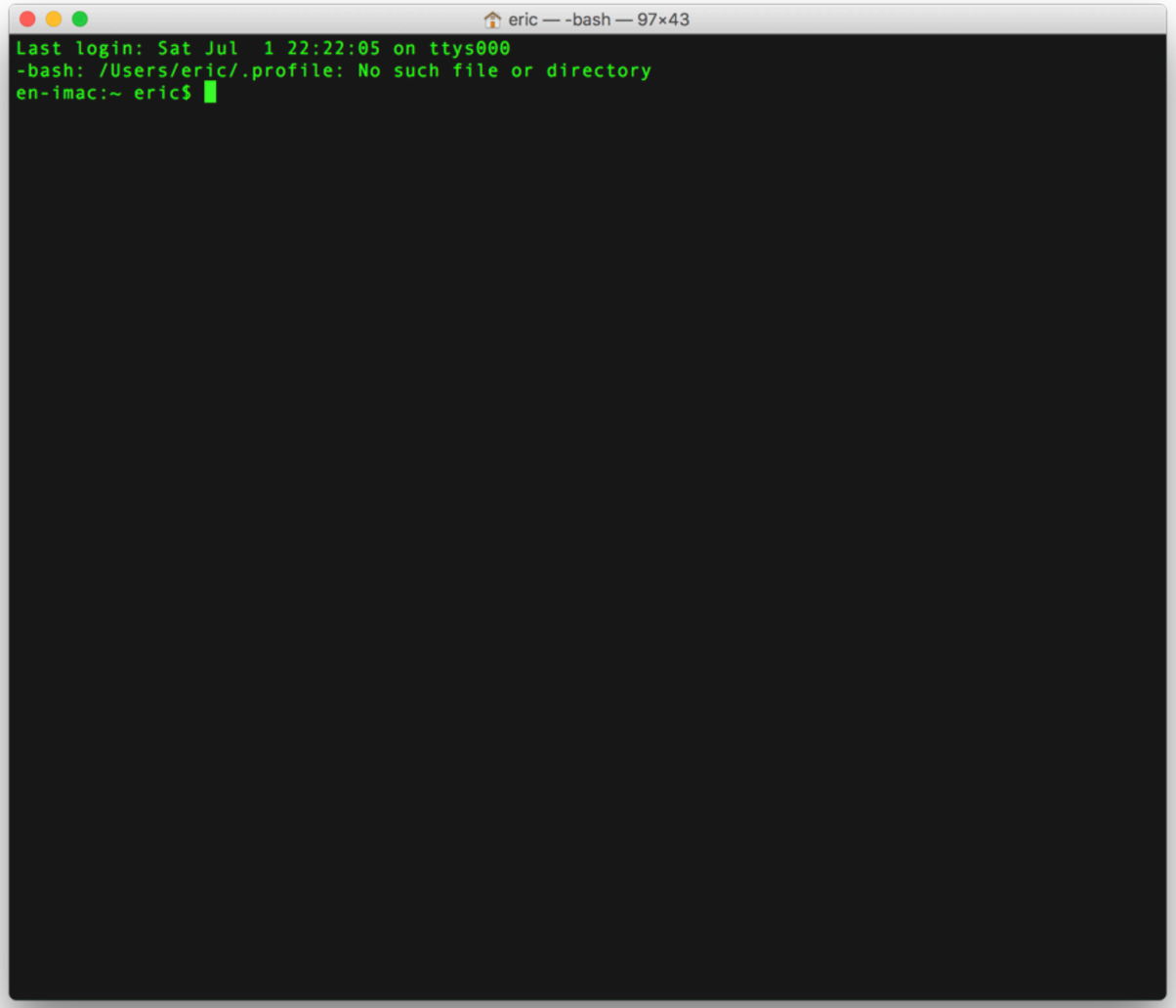
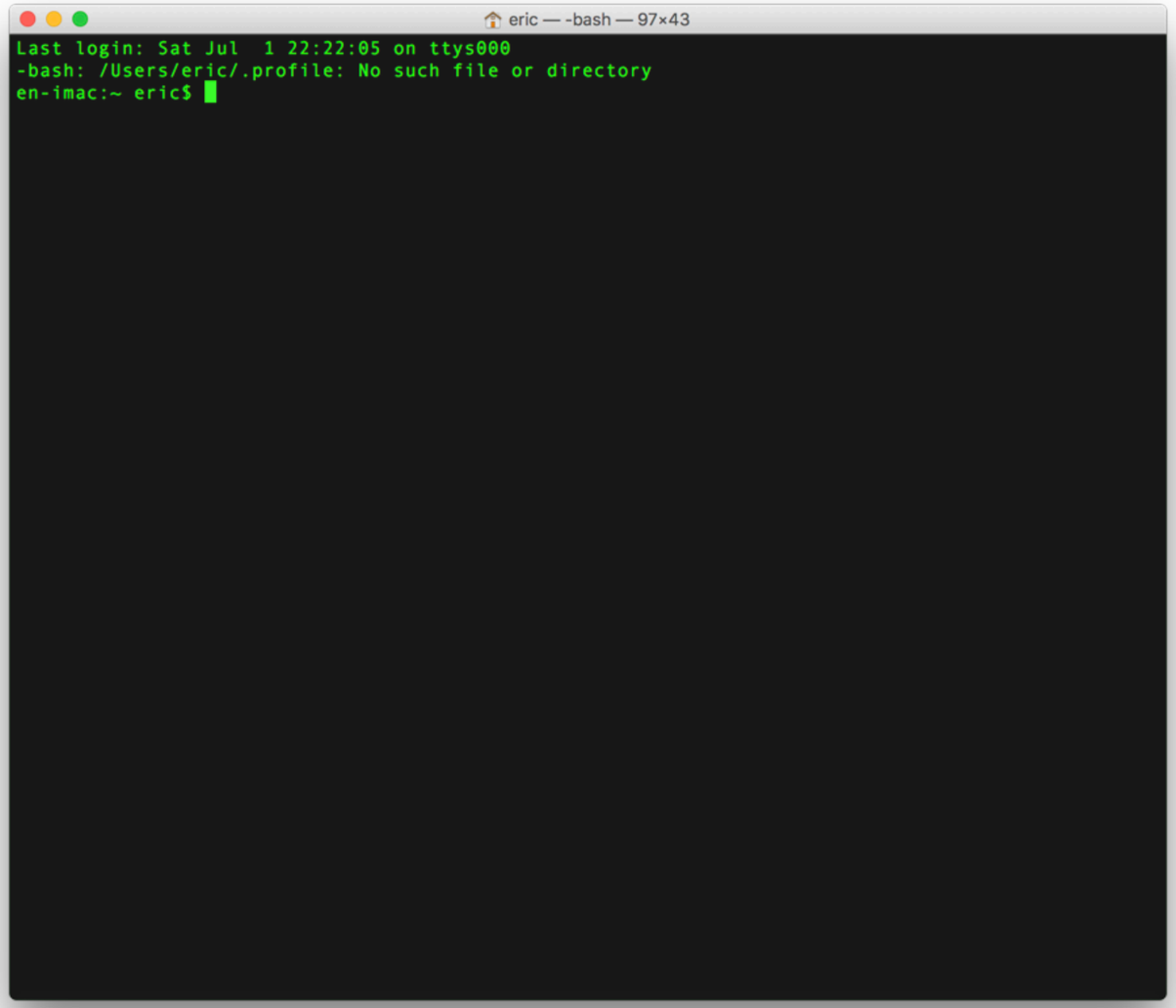
The Command Line

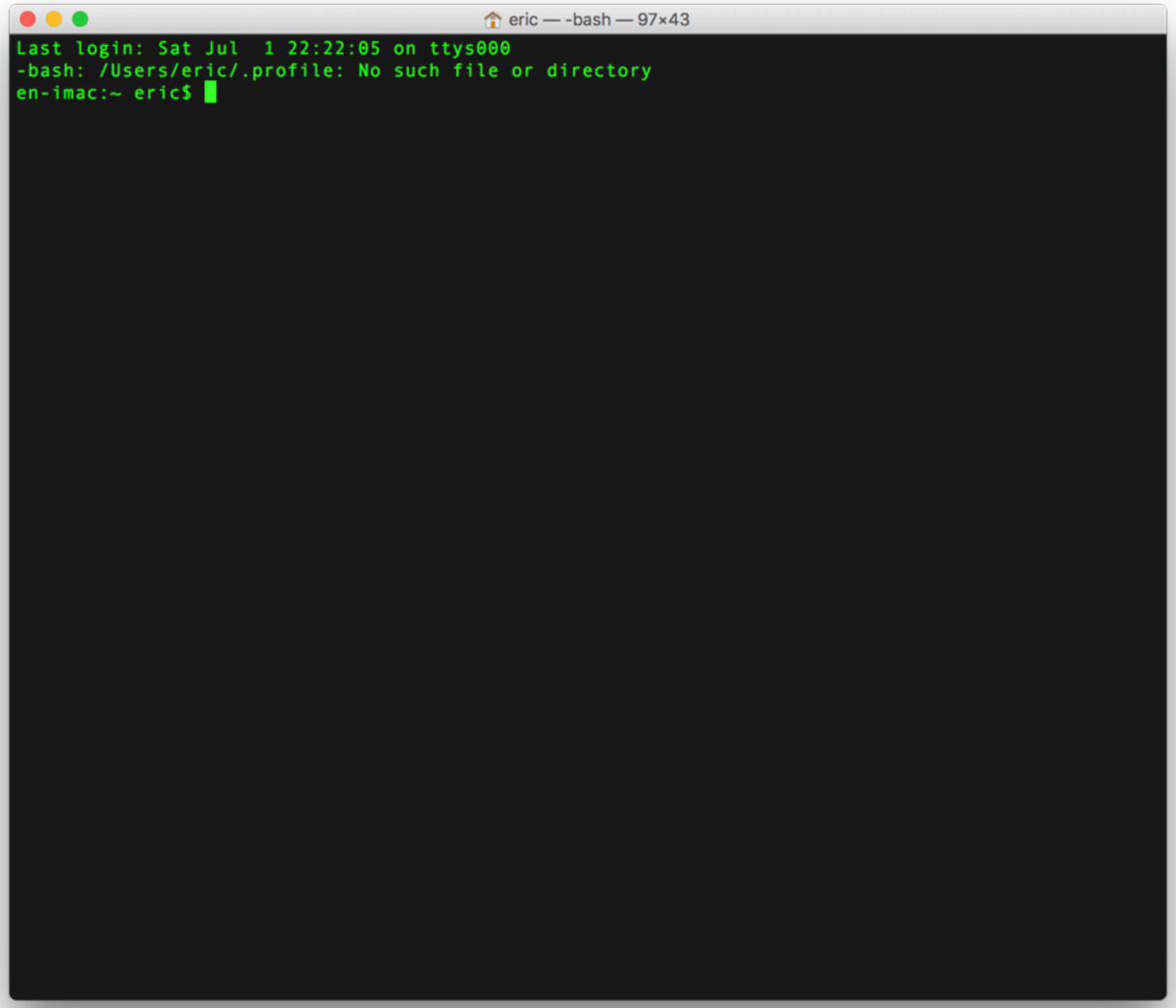
The command line is a text interface for your computer. It's a program that takes in commands, which it passes on to the computer's operating system to run.

From the command line, you can navigate through files and folders on your computer, just as you would with Finder on Mac OS or Windows Explorer on Windows. The difference is that the command line is fully text-based.


eric — -bash — 97×43
Last login: Sat Jul 1 22:22:05 on ttys000
-bash: /Users/eric/.profile: No such file or directory
en-imac:~ eric$



In the terminal, first you see $. This is called a *shell prompt*. It appears when the terminal is ready to accept a command.



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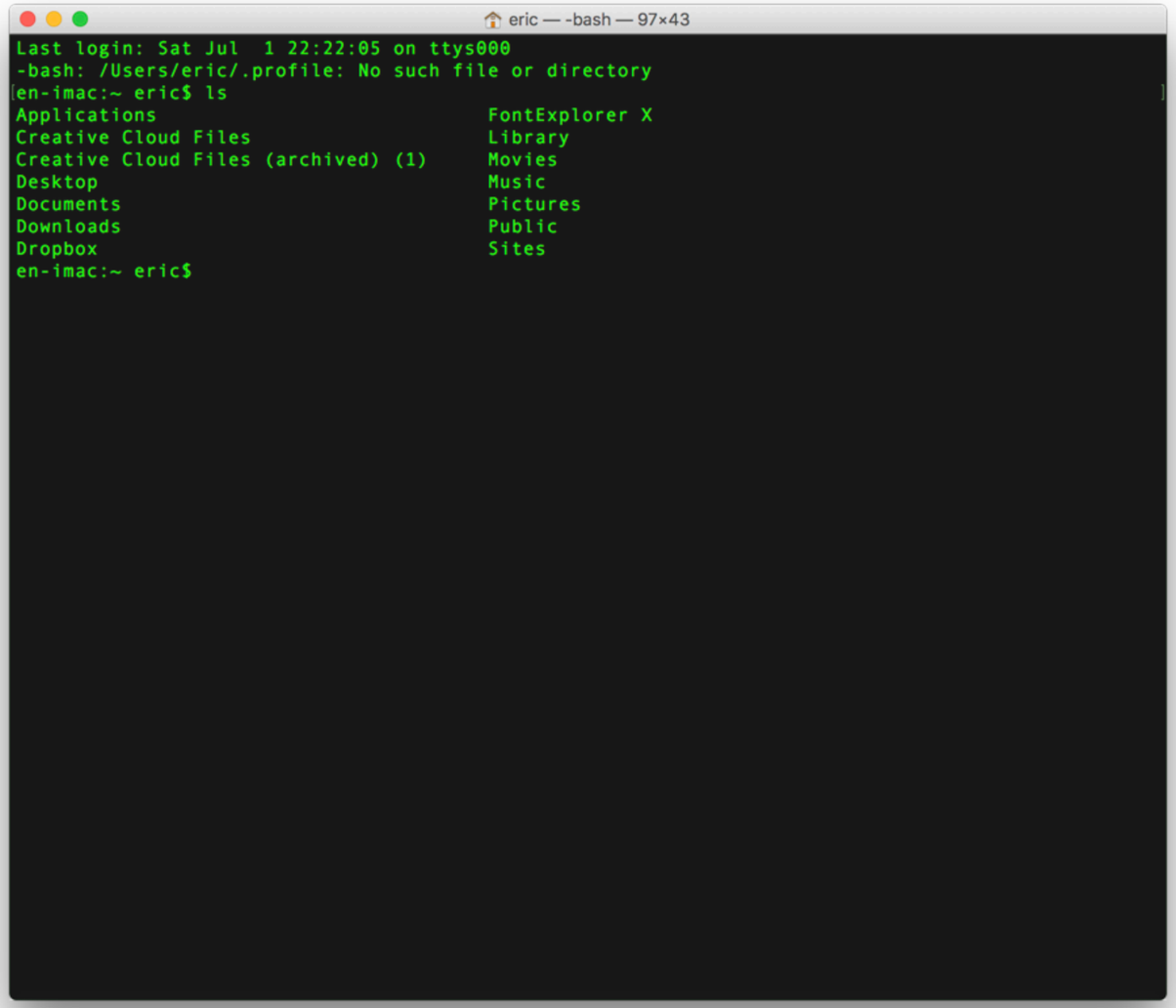
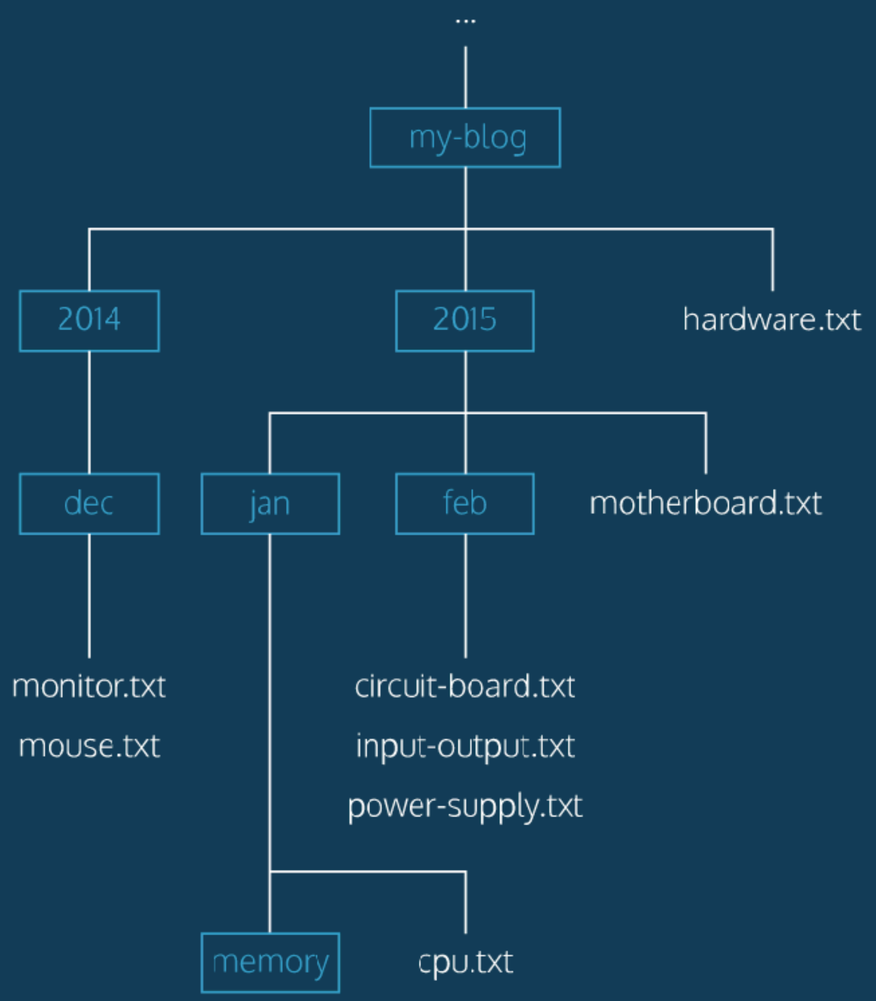


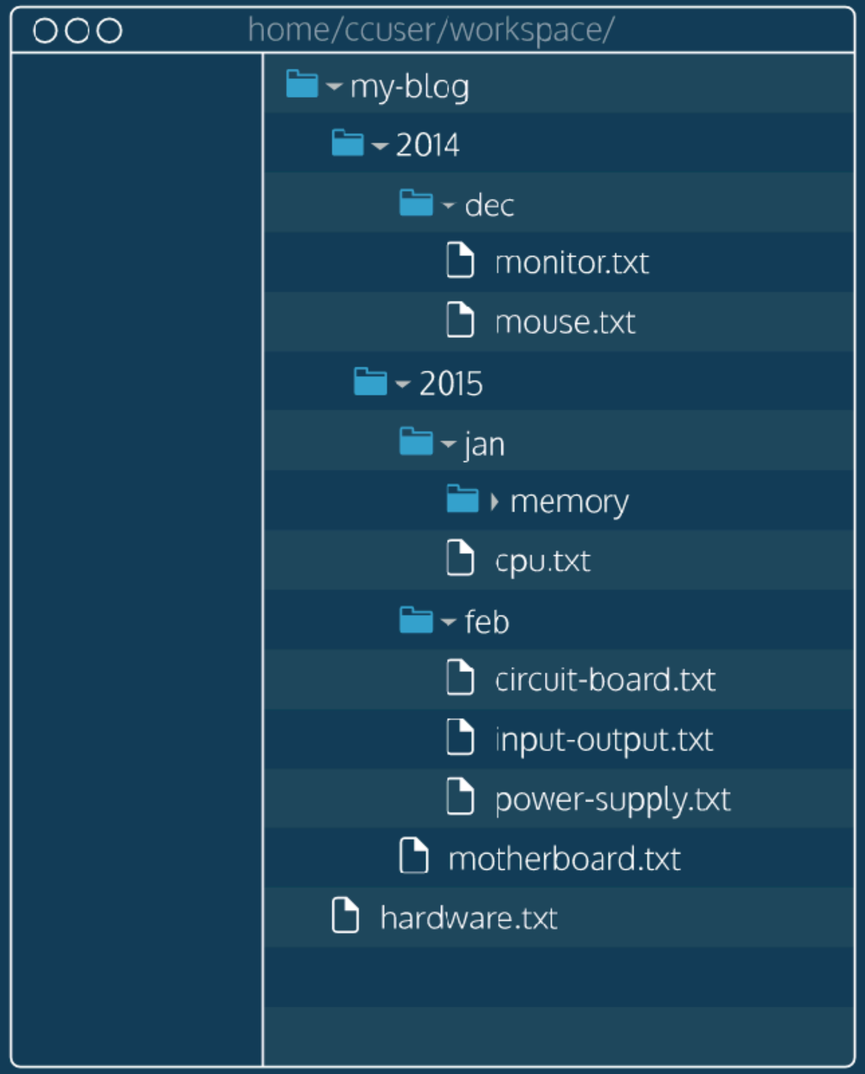
Lets try entering a *command*. If we type `ls` and press return we see a *list* of the *files* and *directories* in the folder you are currently in.

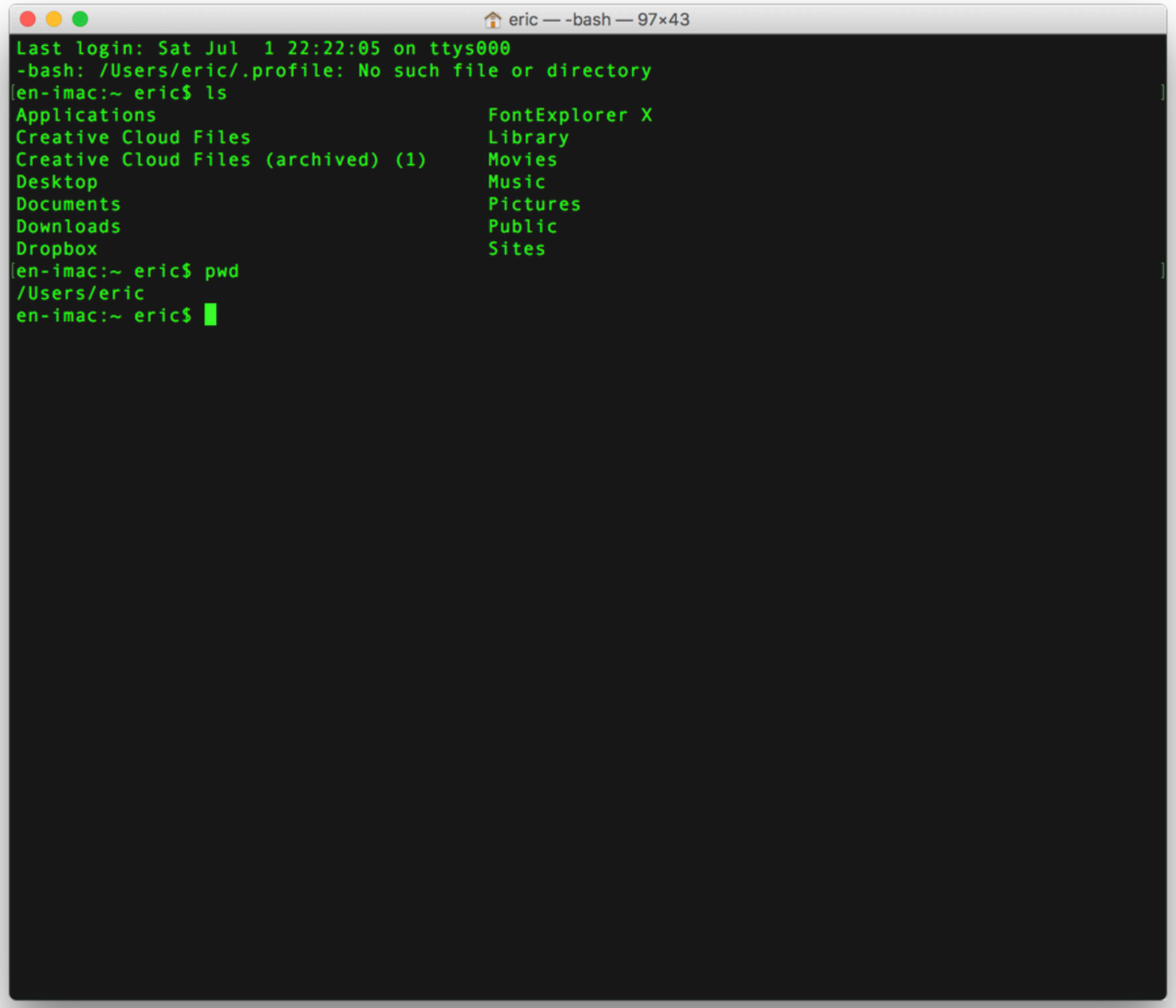
When using the command line, we refer to folders as *directories*. Files and directories on your computer are organized into a *filesystem*.

Filesystem
Tree

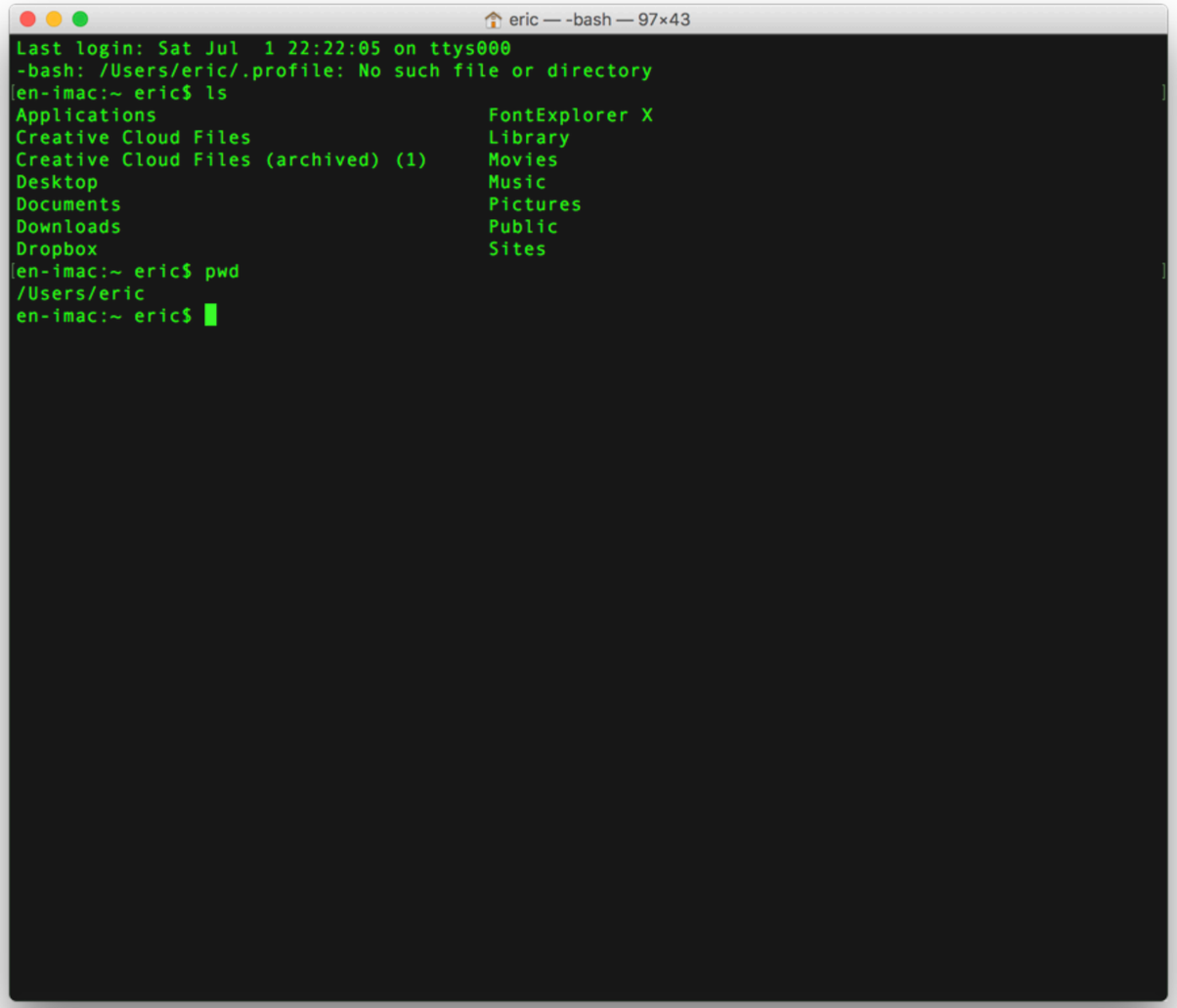


File Manager
Graphical Interface

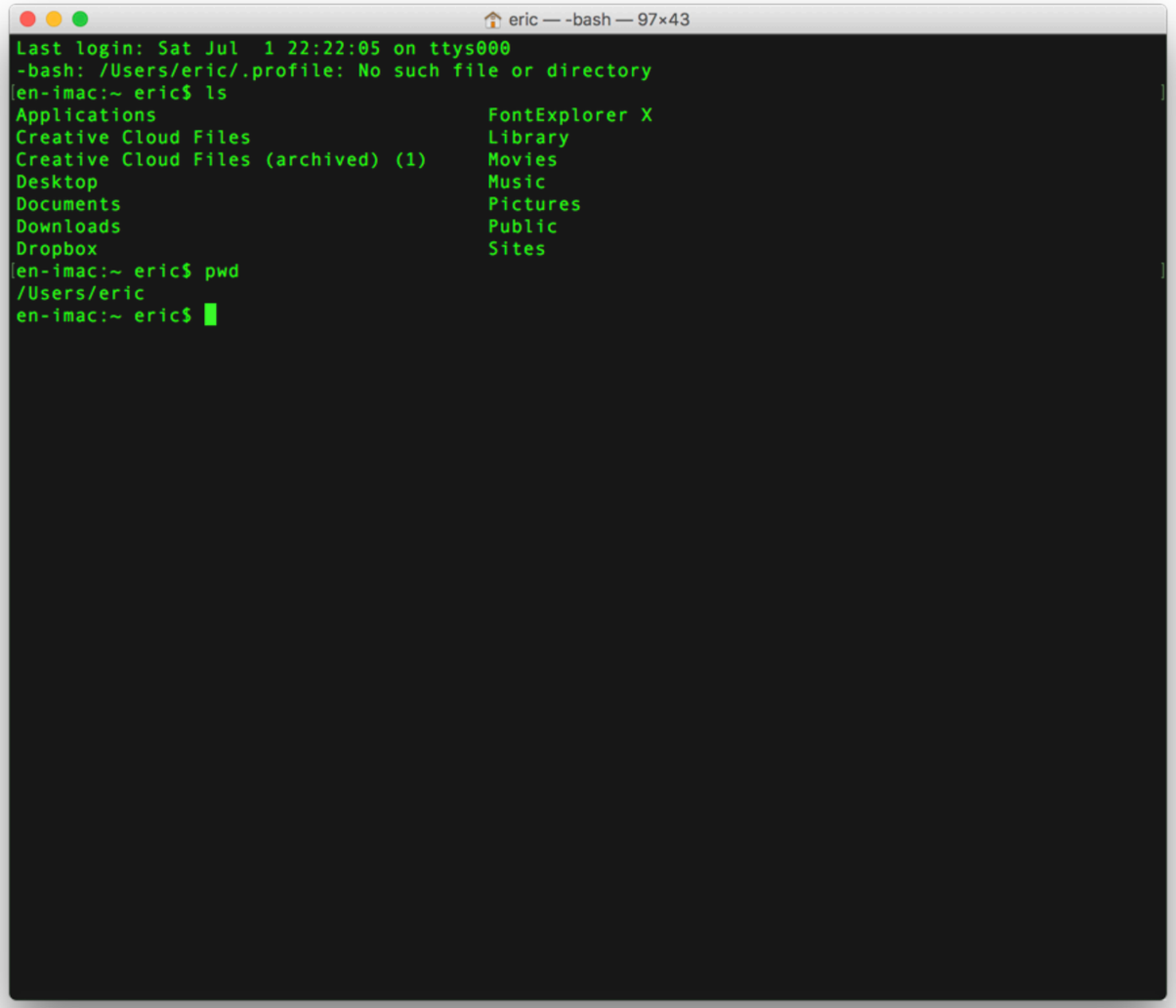




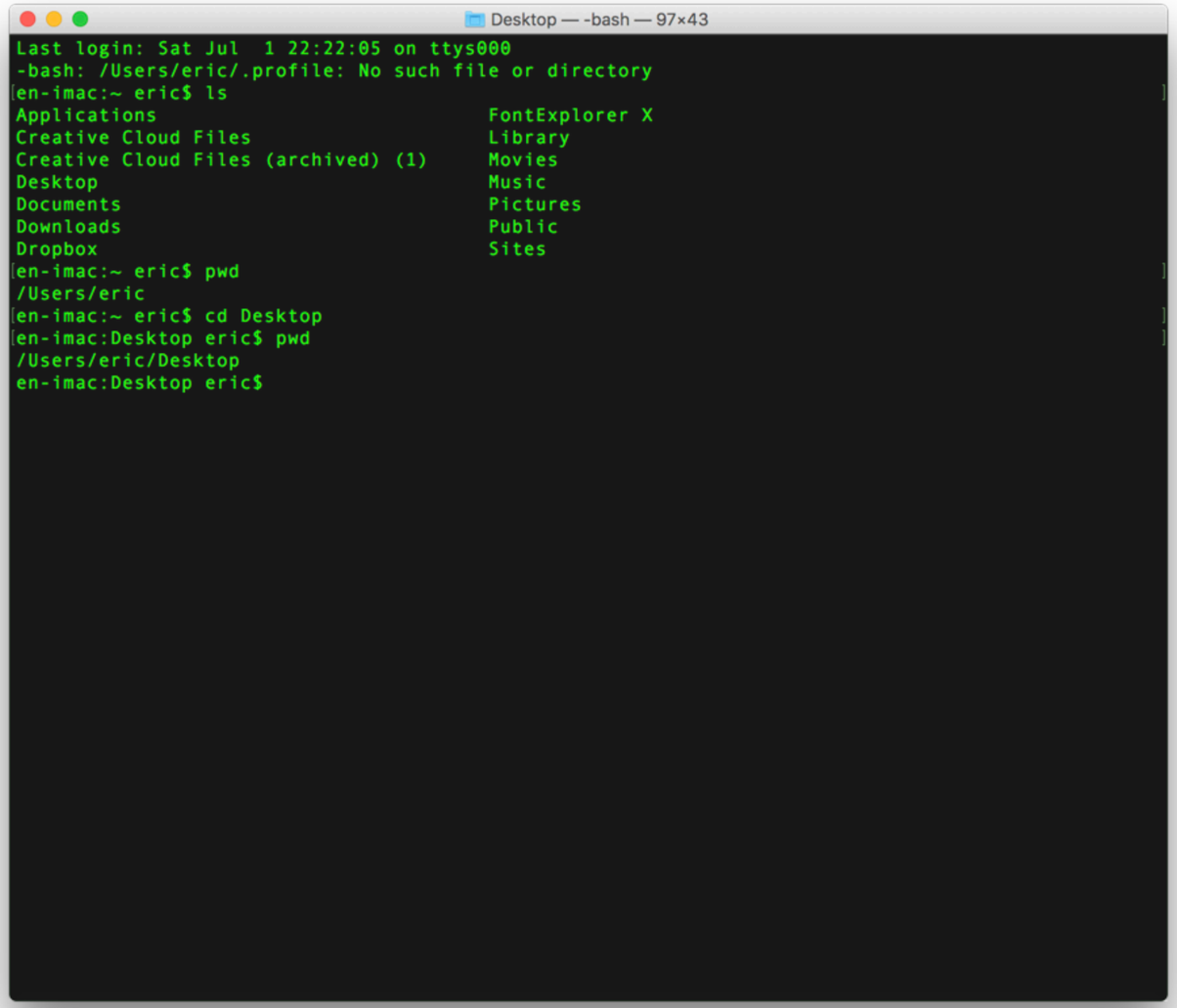
Let's see how to navigate the filesystem from the command line. In the terminal, after the shell prompt, type pwd and press Enter.



pwd stands for "print working directory". It outputs the name of the directory you are currently in, called the *working directory*.



pwd stands for "print working directory". It outputs the name of the directory you are currently in, called the *working directory*. Together with **ls**, the **pwd** command is useful to show where you are in the filesystem.



Now lets try typing **cd**.

This stands for "change directory". Just as you would click on a folder in Windows Explorer or Finder, **cd** switches you into the directory you specify. In other words, **cd** changes the working directory.

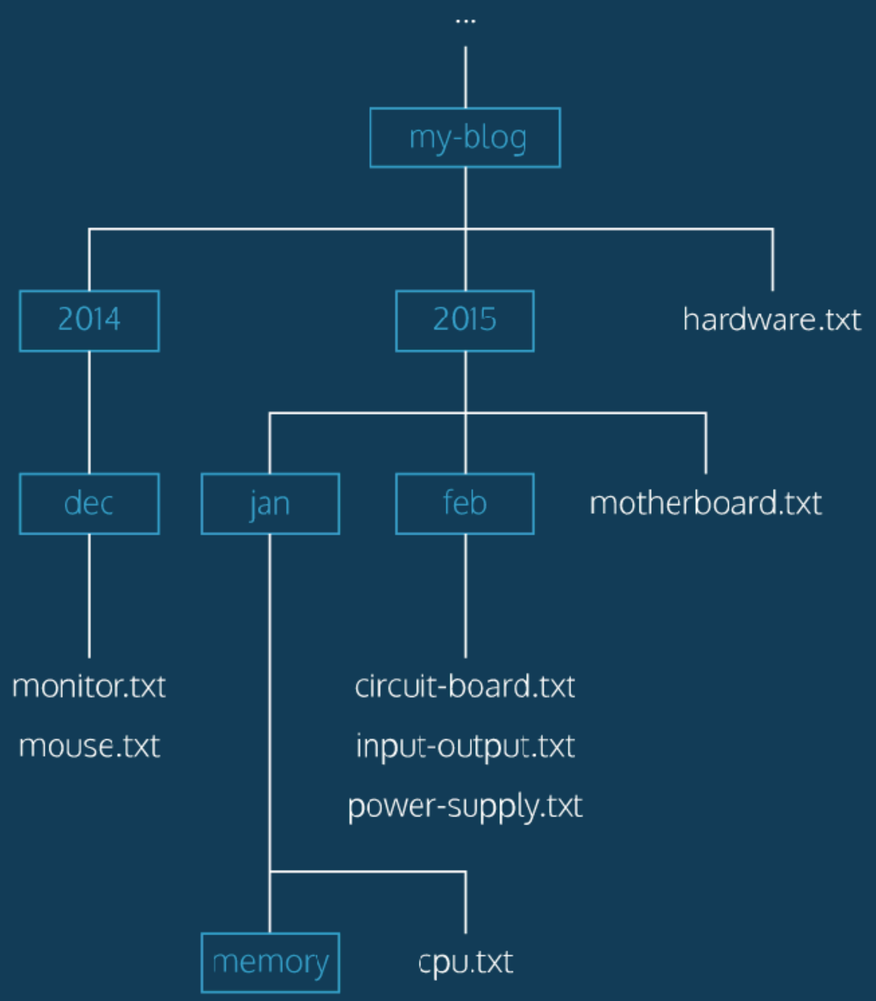
To navigate directly to a directory, use cd with the directory's path as an argument. You can also take several steps in one command. For example

```
cd jan/memory/
```

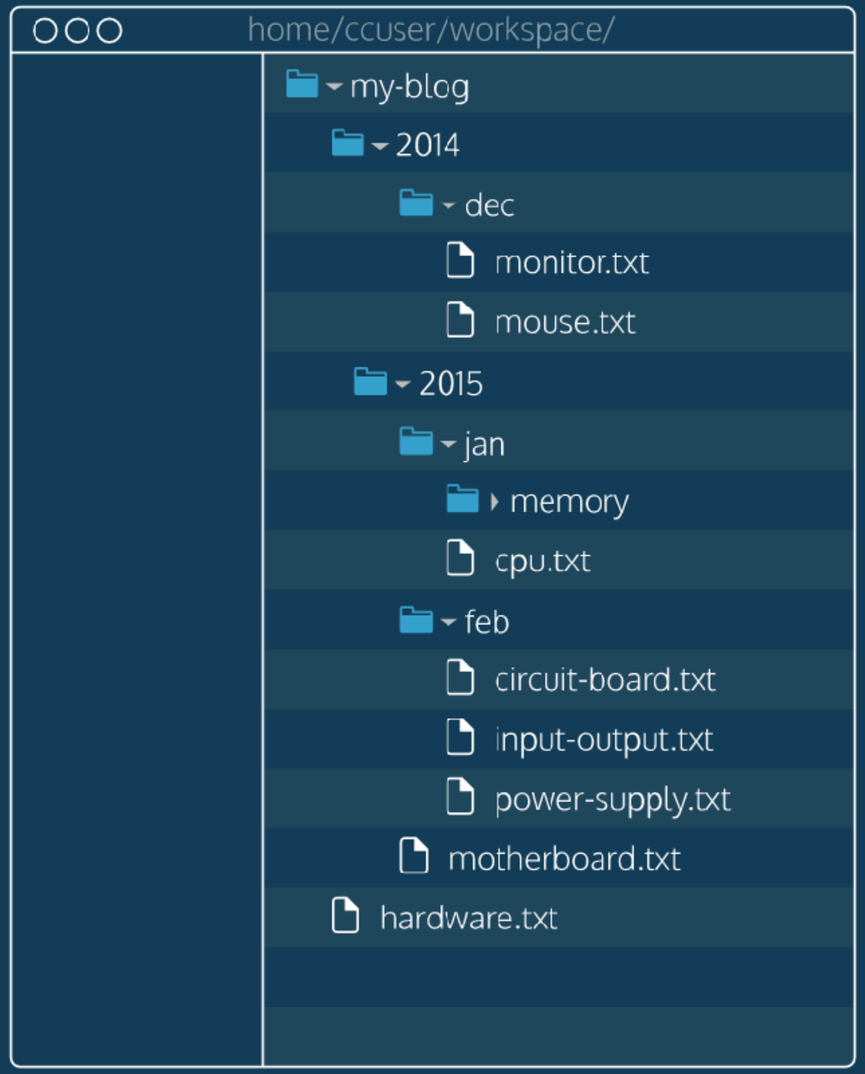
command navigates directly to the jan/memory directory. Passing .. as the argument would move up one directory.

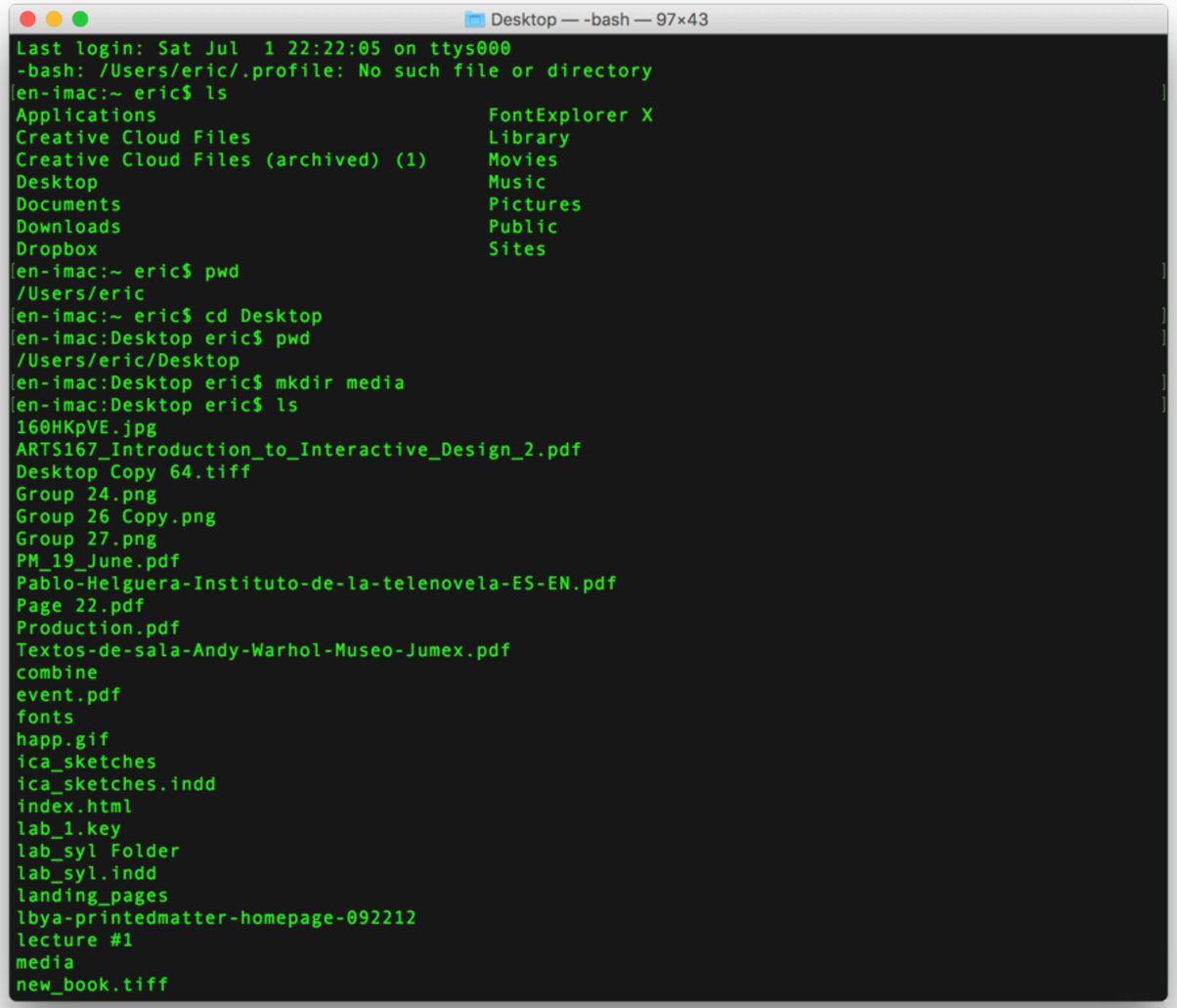
```
cd ..
```

Filesystem
Tree



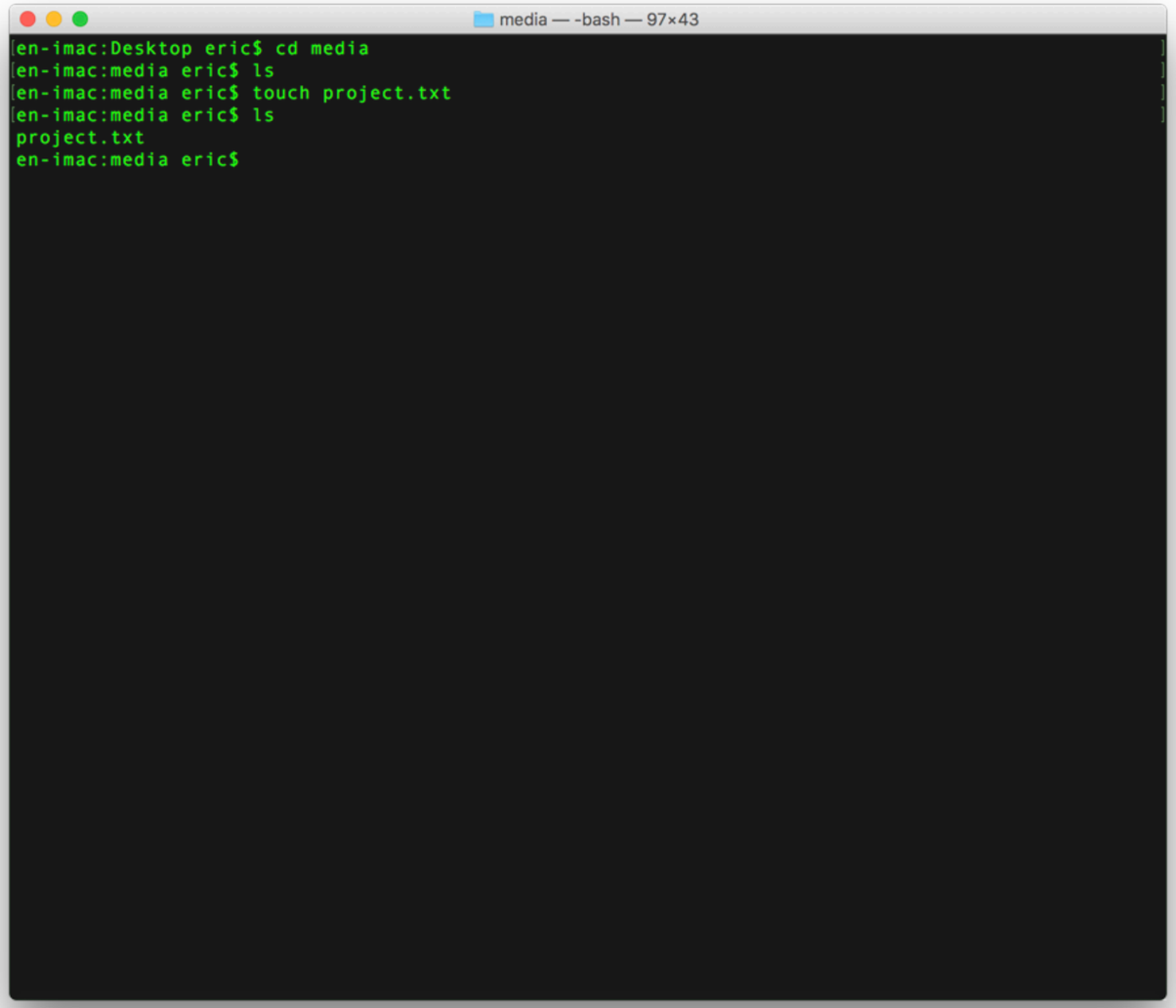
File Manager
Graphical Interface





Now lets try typing **mkdir**.

This command stands for "make directory". It takes in a directory name as an argument, and then creates a new directory in the current working directory.



Now lets try typing touch project.txt

This command creates a new file inside the working directory. It takes in a filename as an argument, and then creates an empty file in the current working directory.

pwd

ls

cd

mkdir

touch

pwd	outputs the name of the current working directory.
ls	lists all files and directories in the working directory.
cd	switches you into the directory you specify.
mkdir	creates a new directory in the working directory.
touch	creates a new file inside the working directory.