

Using Bash on Mac Terminal

Learning Objectives

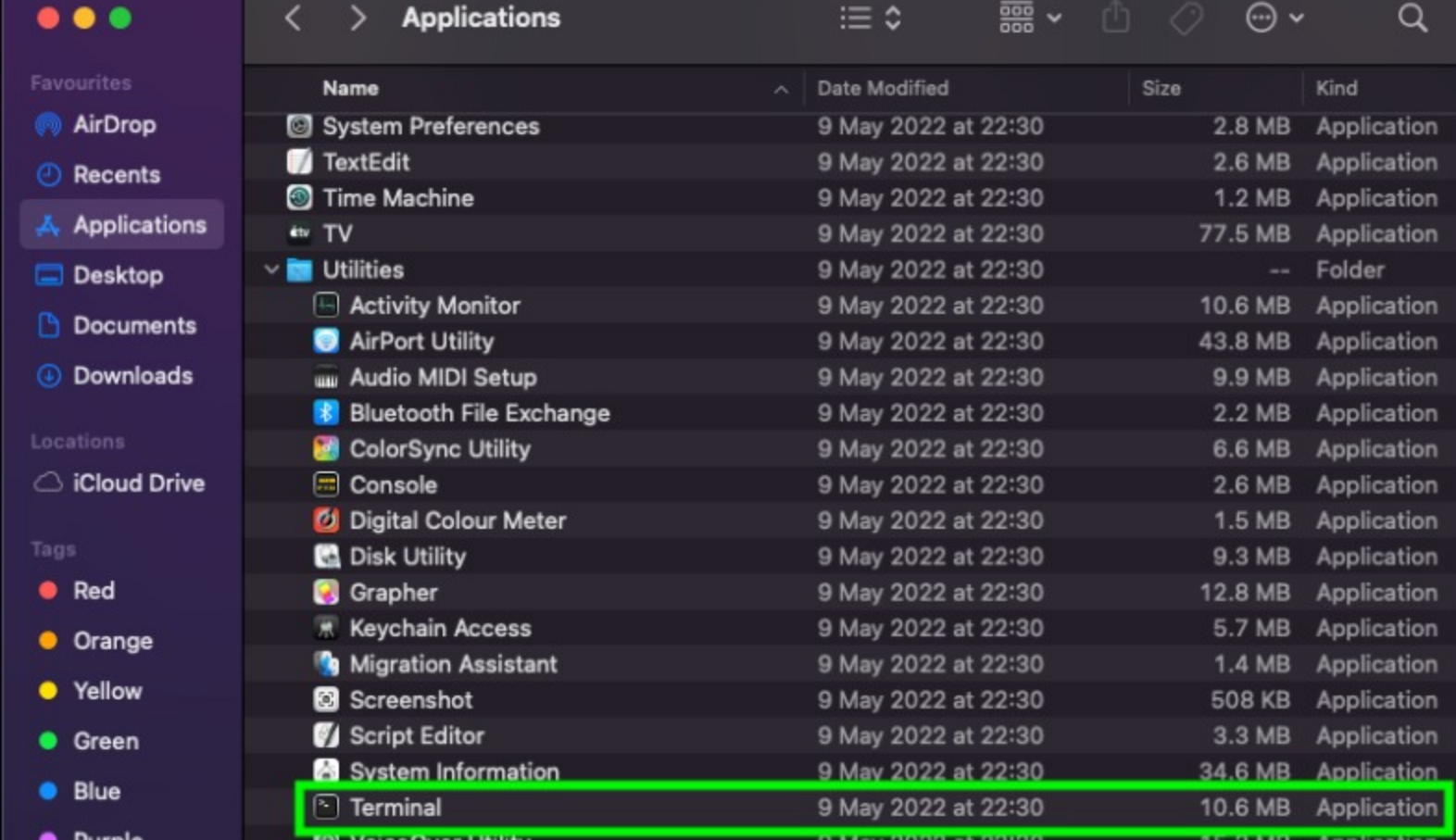
- Learners will understand how to open the command line - terminal on Mac.
- Learners will become familiar with the most common commands.

Mac Terminal

The Terminal on Mac can be opened in one of three ways: Finder, Launch Pad and Spotlight.

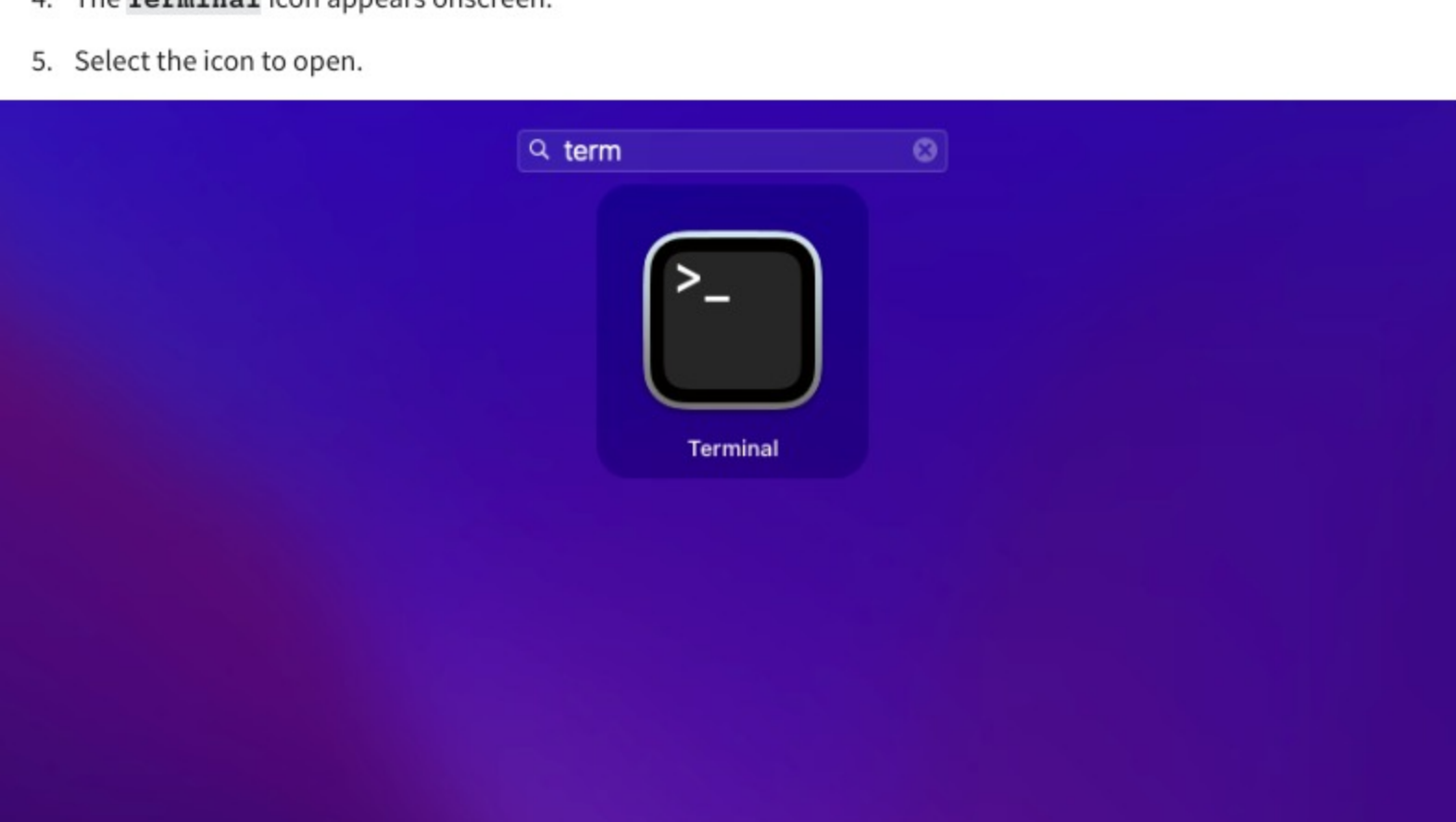
Finder

- Scroll to the bottom of your desktop and click on the **Finder** icon.
- Click on **Applications** on the left-hand side of the screen.
- Locate the folder called **Utilities** and expand it.
- The **Terminal** app should be visible, select it to open.



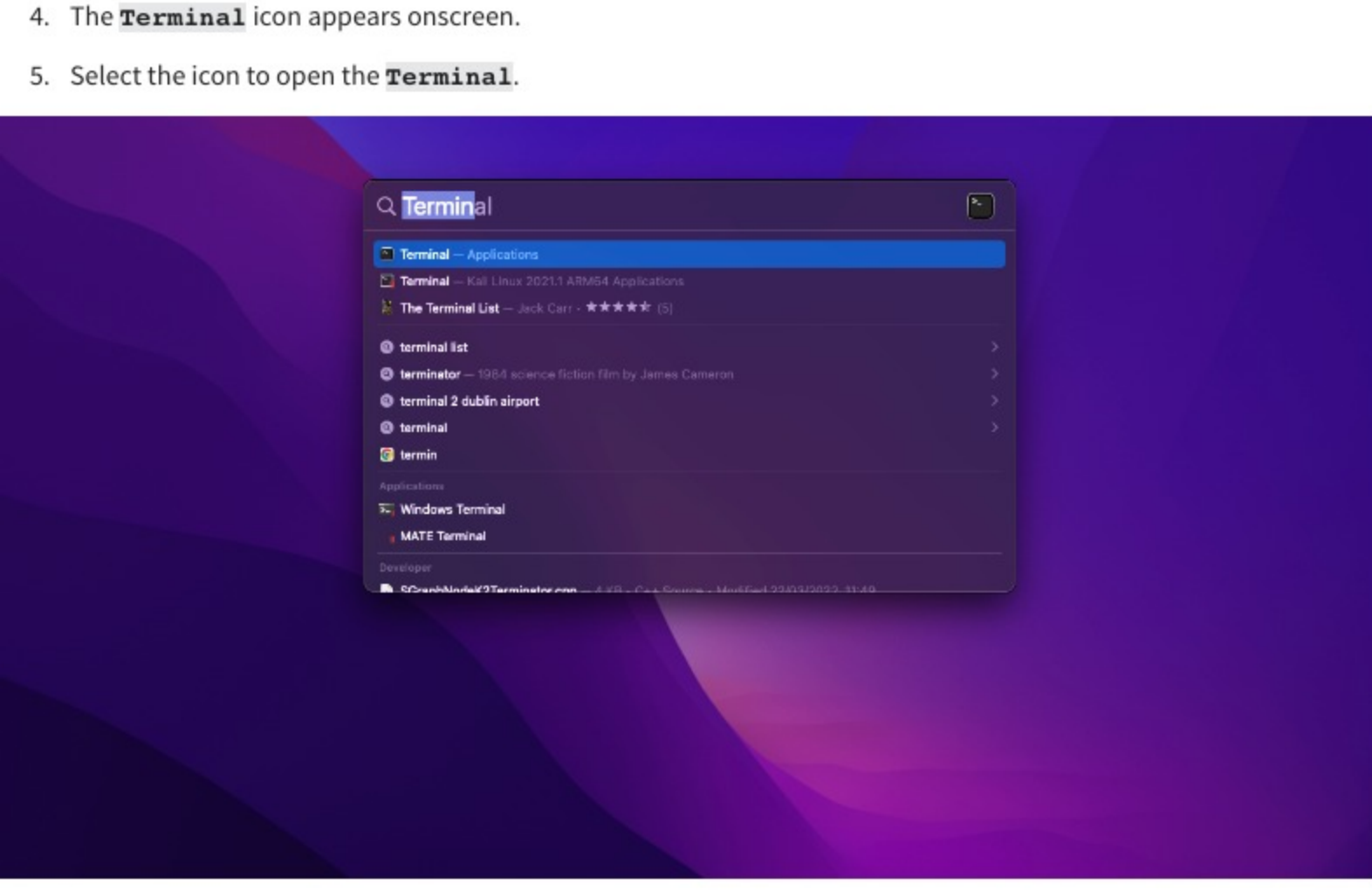
Launch Pad

- Press the **F4** command.
- Launch Pad view appears onscreen.
- Select the search bar and type **Term** (short for **Terminal**).
- The **Terminal** icon appears onscreen.
- Select the icon to open.



Spotlight

- Press the command key and the space bar.
- The Spotlight modal appears.
- Type in the word **Terminal** or **Term** for short.
- The **Terminal** icon appears onscreen.
- Select the icon to open the **Terminal**.



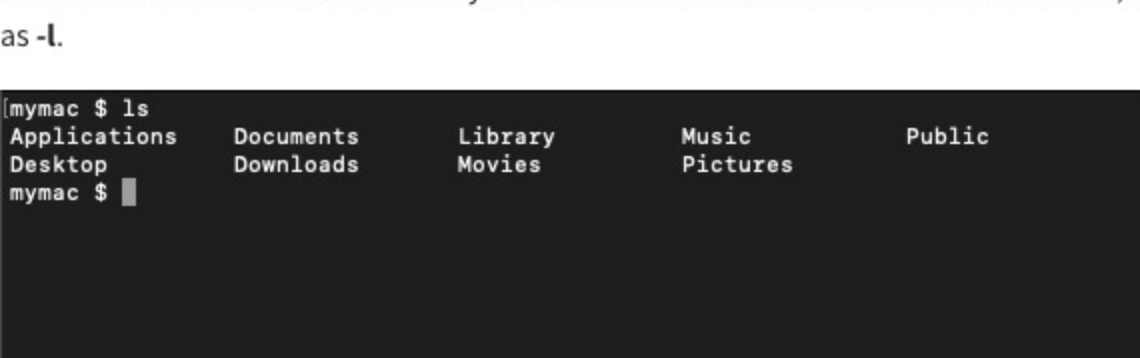
Bash commands

Bash provides a list of commands for navigating through files, viewing the contents of files, and edit features for changing or updating the contents of a file. Below is a list of the most common commands:

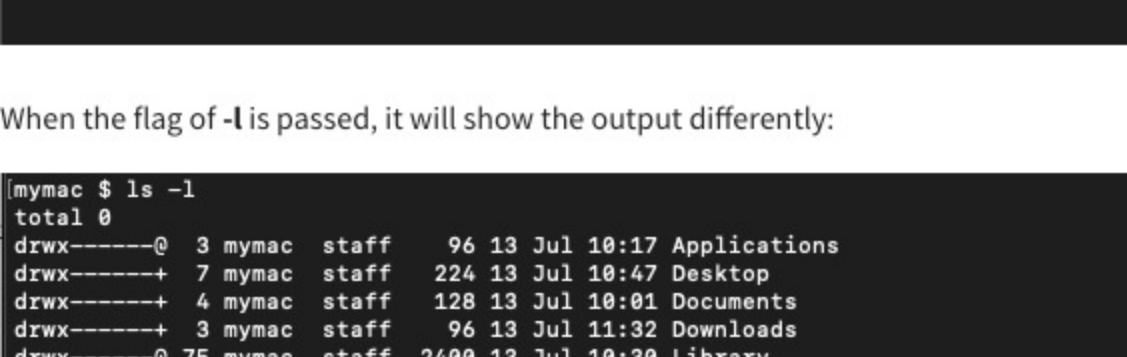
Command	Used for
cd	Change Directory
ls	List command used for showing the content of a directory.
rm	Remove command used for removing a file or a directory
mv	Used to move files or folders to another location
touch	Allows creating of a new empty file or to update a timestamp on a file
cp	Used to make a copy of a file or folder
mkdir	Make a new directory
pwd	Print work directory, shows the current location in the shell
cat	Allows reading or concatenation of a file
less	Displays the contents of a file one page at a time.
grep	Global regular expression, allows for searching contents of files or folders

Flags

Every bash command has flags for changing the output of the command itself. For example, the **ls** command prints out the list of contents inside a directory. If we wanted to show the list in a different view, we simply need to add a flag such as **-l**.

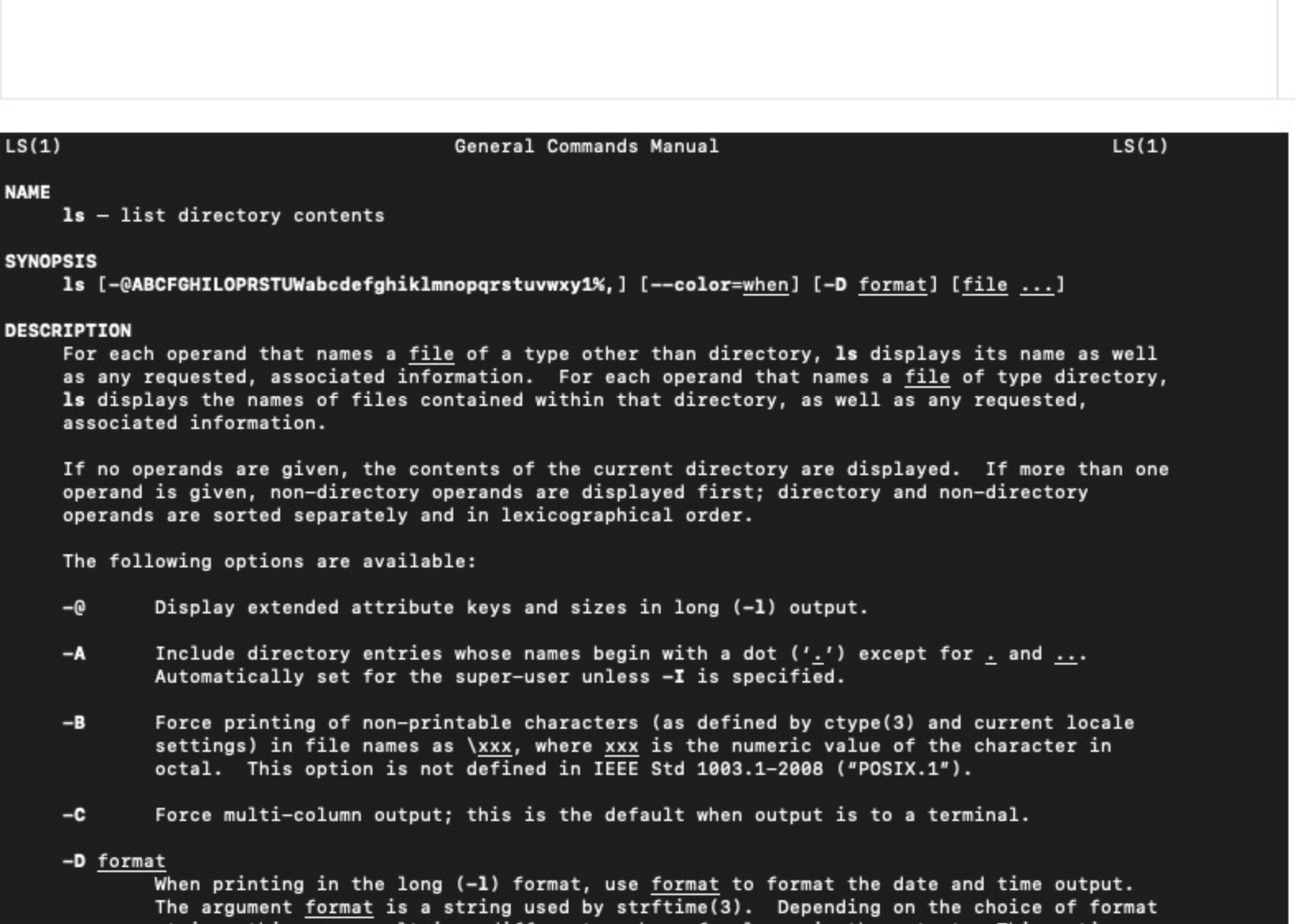
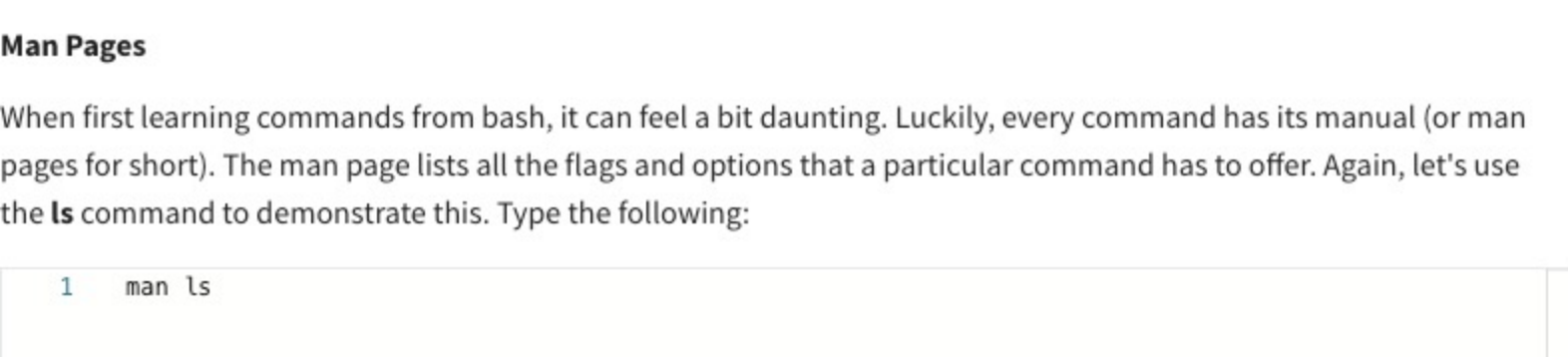


When the flag of **-l** is passed, it will show the output differently:



Man Pages

When first learning commands from bash, it can feel a bit daunting. Luckily, every command has its manual (or man pages for short). The man page lists all the flags and options that a particular command has to offer. Again, let's use the **ls** command to demonstrate this. Type the following:



The man pages are a great way to recall the different flags that are available and a great tool in your arsenal to becoming more fluent in bash.

Editing

There are many options for editing files in bash. The most common is usually **VI** or **Vim**. **VI** stands for visual editor. It's used for making edits and changes to a file and saving them. It's similar to what you may have used in applications like Word. **VIM** is a better version of **VI** with some improvements - hence its name: visual editor improved. Learning the commands in **Vim** will feel different from GUI applications, but once you practice, it will feel like second nature. **Vim** uses modes to determine the commands you can work with:

- Normal mode: Default mode
- Insert mode: Allows the contents of the files to be edited.
- Command line mode: Normal commands begin with **:**

Go to next item ✔ Completed