Bash & Git

Mr. Poole

How do you manipulate files on your computer?

Folders and Mouse!

Directories

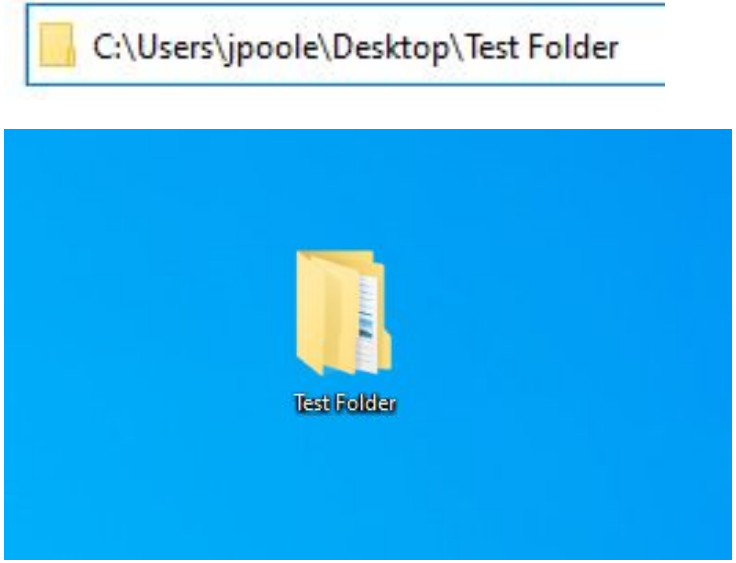
Every file on your computer has a “location”.
The folder that it is in is called a “directory”.

Everything starts from your hard drive!

In this case, my hard drive is **C:**

Folders

For this folder on my Desktop, it’s directory is:

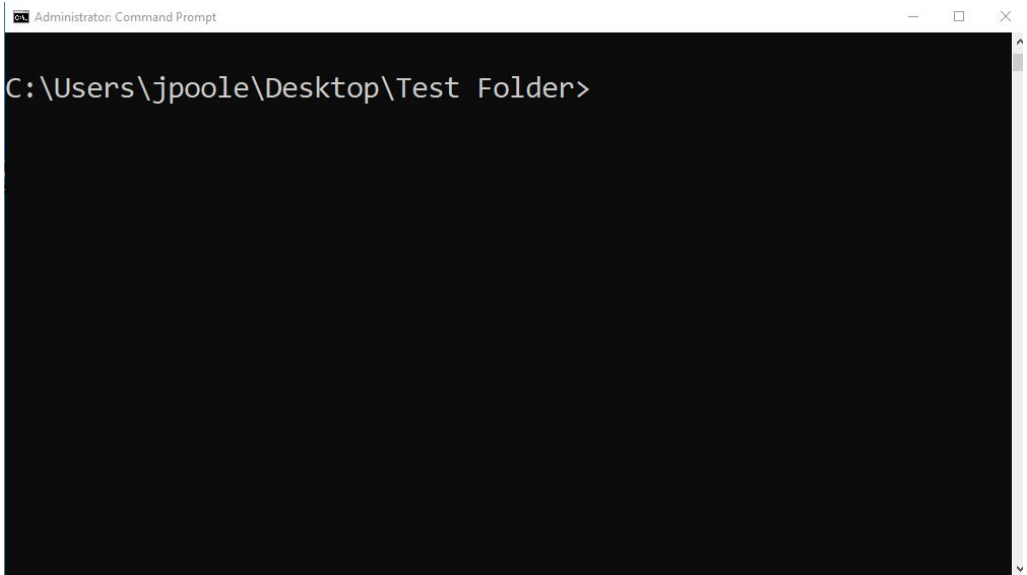


The Shell

Instead of using a **folder** and a **mouse**,
we're going to use a **shell** and **commands.**

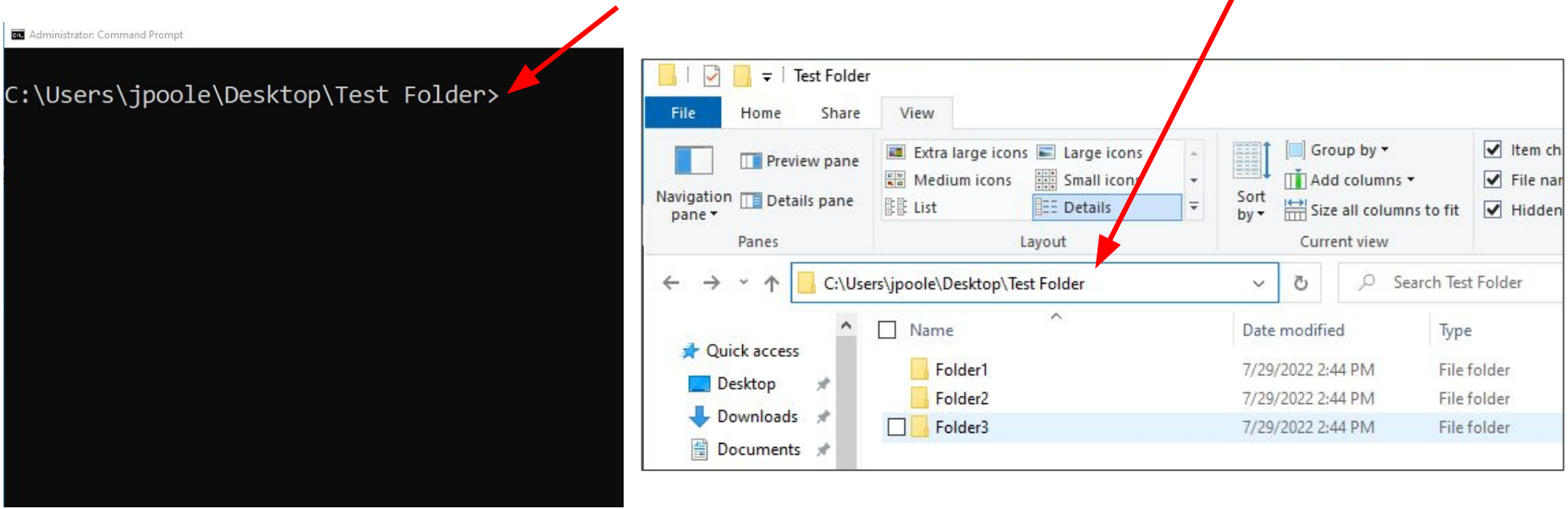
For **Windows,** this is **Command Prompt**.

For **Mac**, this is **Terminal.**



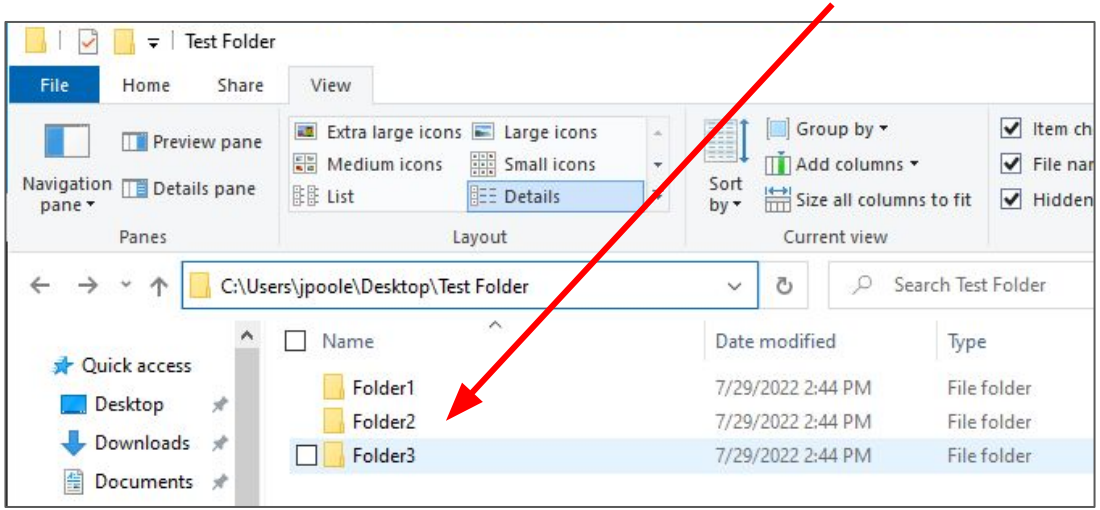
Differences

As you can see, they are both pointing to the same place.



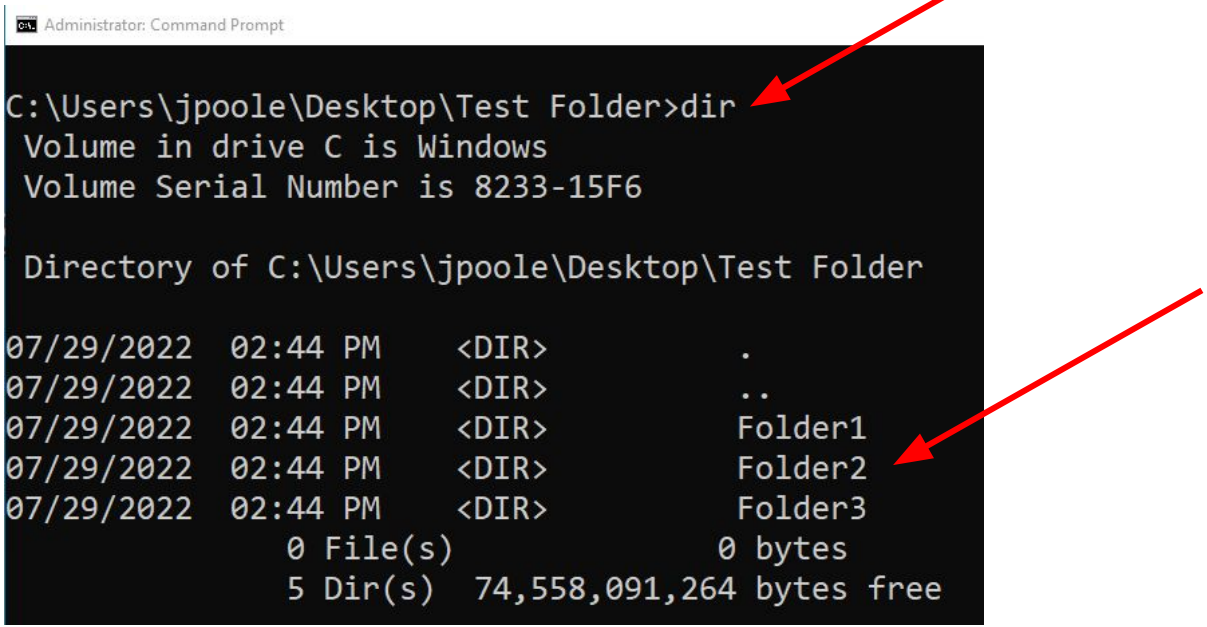
Looking at what's inside - Folder

Here, I can see 3 folders inside the "Test Folder"



Looking at what's inside - Bash

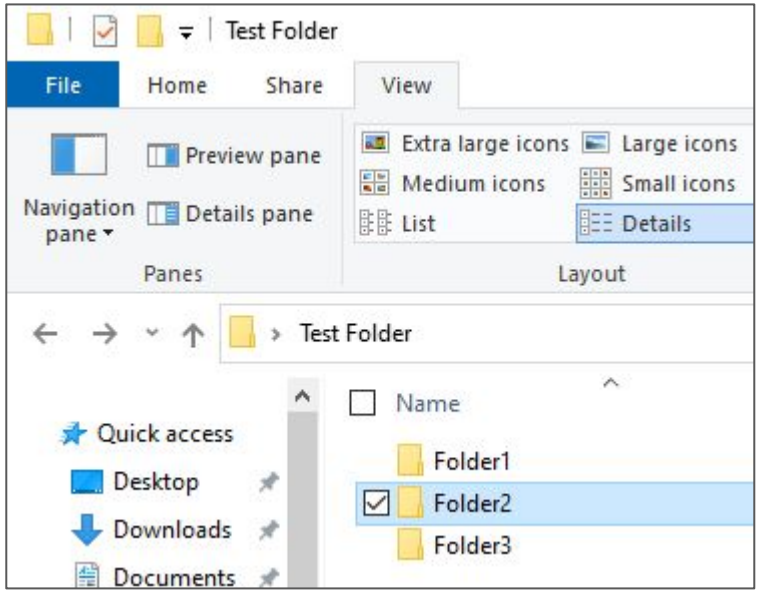
Here to do the same, we use the "**dir**" or **directory** command.

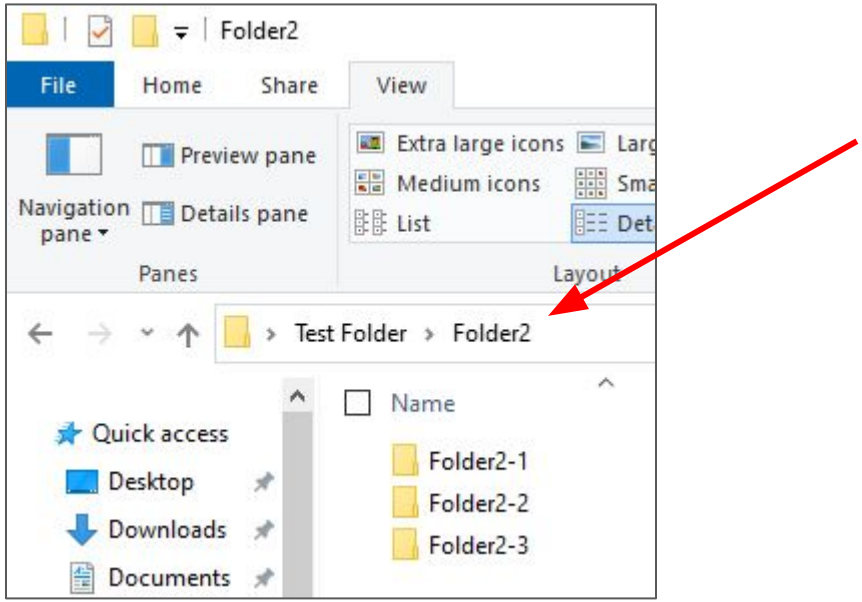


This is "**ls**" in Linux/Mac for **list**.

Changing Directories - Folder

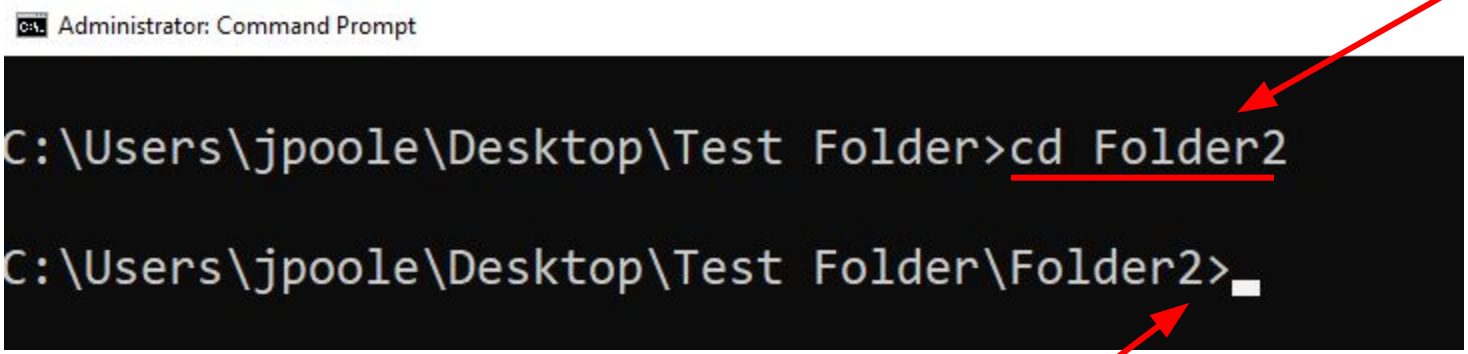
We want to open “Folder2” here, we’d do that by clicking twice to open it!





Changing Directories - Bash

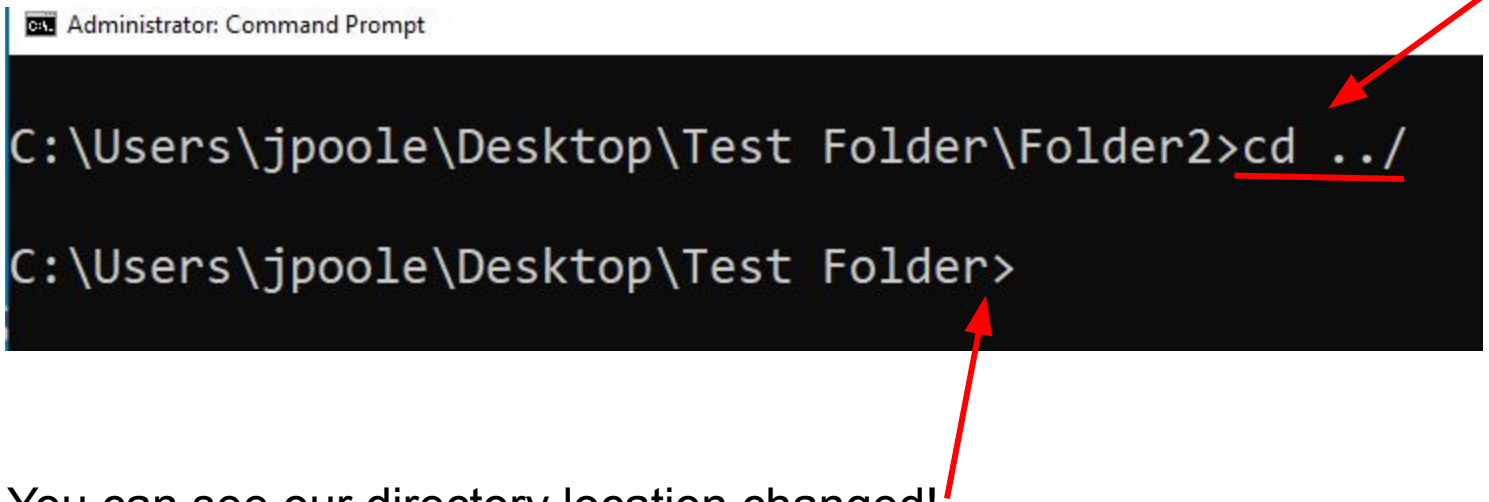
To open a folder in bash, we use the “**cd *foldername***” command,
aka “**change directory**”.



You can see our directory location changed!

Moving back directories - Bash

Use the **“cd ../”** command to go back a folder.



You can see our directory location changed!

Other handy Linux Commands

pwd - Shows **p**resent **w**orking **d**irectory

clear - Clear the shell to look empty

mkdir - Makes a directory aka folder

touch ____ - Create a file with the name _____

ls -a - List all files including hidden files

mv, cp, rm ___ - Move, Copy, Remove file

vim ____ - Shell editor

If your shell gets stuck or breaks

Hit **Control + C**

Let’s get on with Git

What is Git?

Git allows for file tracking and collaboration on projects and “repositories”.

Git is like **Google Docs History** feature. It creates **version control.**

We’ll be using it to copy and update a textbook repository.

Git Clone Repository

Let’s start by copying the textbook to your device!

Type: **“git clone _____”**

```
C:\Users\jpoole\Desktop>git clone https://github.com/JacobPooleCV/AP_Poole23.git
```

Textbook link can be found on my website

Git Commands

All within your shell, you can use the following commands:

git pull **-** Pull all edits from GitHub (update)

git add * **-** Add local changes to your **local** git version control

git commit -m “<u>message</u>” - Commits all added files to a revision log

Message should be replaced with a comment

git push **-** Push all of your committed changes to your remote repository

Compiling and Running Java

Two commands:

javac *.java - Compiles your file, * can be replaced with the file name

java _____ - Runs the file starting with _____ label. Not including extension

The more you use these commands, the easier they will become!