**Introduction to Shell for Data Science**

1. **Command Line Interface (CLI) & Working directory**

A command line interface (CLI) is a user interface to a computer's operating system or an application in which the user responds to a visual prompt by typing in a command on a specified line, receives a response back from the system, and then enters another command, and so forth.

* + - **pwd** to print path of current working directory
    - **clear** to clear commands in the CLI window
    - **ls** to list files. -a flag to show hidden files. -l to list details of every file.
    - **cd** to change directory.With no arguments, it takes you to home directory. cd .. to go up the tree.
    - **mkdir** to create a new directory.
    - **touch** creates an empty file.
    - **cp** to copy files. Use -r flag for recursive copy of one directory contents to another.
    - **rm** to remove a file. Use -r to remove the entire directory contents.
    - **mv** to move files.
    - **date** to print the date
    - **echo** to print a message

Working directory - The directory in which you are currently working.

**Note:** A GUI is used by more users today than a CLI. Dedicated and hard core programmers may lean towards using a CLI for efficiency and speed, but the GUI is more

user friendly and preferred by most users.

1. **Learn about Git Bash**

Download Git for Windows at<https://git-scm.com/download/win>

Video Tutorials:

Introduction to Git

<https://www.youtube.com/channel/UCoA_n_EOfNLZ-RxS4XT30FA>

Git Tutorial 2 - How to Download and Install GIT <https://www.youtube.com/watch?v=TBOy7XW27Qw>

Git Tutorial 3 - Config your Username & Email

<https://www.youtube.com/watch?v=tq1Rmkz0XIo>

Git Tutorial 4 - How to create a Github Account for Free

<https://www.youtube.com/watch?v=2NxsjFtGjBA&t=26s>

Git Tutorial 5 - How to create a repository in Git

<https://www.youtube.com/watch?v=XlJK6Z0hgaA>

\*\*\* Highly recommended: Command Line Essentials: Git Bash for Windows

<https://www.udemy.com/git-bash/>

This lab is designed to make sure you have done the basic software setup.

Submit all 3 links to Spectrum “Lab 1”.

Part 1

* + Set up a Github account (use your own name).
  + Create a repo called **introdatascience**
  + Submit the link to your Github account

Part 2

* + Create a text file called HelloWorld.md
  + You may create using Notepad or through CLI.
  + Add the line "## This is a markdown file" to the document (without the quotation marks).
  + Push the document to the **introdatascience** repo you created on Github
  + Submit the link to the HelloWorld.md file on your Github repo.

Part 3

* + Fork the data sharing repository here: <https://github.com/SalimahM/courses>
  + Submit the link to the forked repository on your Github account.