Introduction to Scientific Computing
Meeting 2
Unix Commands

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Last meeting

- General introductions
- Overall objective
- General overview of the topics to be covered
- Meeting structure
- Recommended software
- A few recommended resources
- Quick look at a Python project
- Quick demo of Git Bash shell
- Questions

FYI

- For now, sharing slides and recordings through my Google Drive.
  - Recordings are large; share via WebEx?

Today's Objective

1. **Learn** some basic Unix commands
   - Moving around file system
   - Viewing listing of files and corresponding file information
   - Opening files and web browsers

- **Why?**
  – Good basis for learning how to program.
  – Becoming more comfortable on command line
  – Becoming more efficient

Quick Demo of Some Basic Commands

$ whoami

$ echo "hello world"

$ echo $PATH

$ pwd

$ ls

$ cd

$ start *.png

Video – The Unix Shell

- Software Carpentry, Greg Wilson
  - The Unix Shell: Introduction
    - http://software-carpentry.org/v4/shell/
  - The Unix Shell: Files and Directories
    - http://software-carpentry.org/v4/shell/filedir.html

Try Out Some Commands -
Moving Around and Viewing File Listings

$ pwd	• print working directory
$ cd	• change directory to home
$ cd *some_directory*	• change directory to some directory
$ cd .	• single period refers to current directory
$ cd ..	• double period refers to parent directory
$ cd dir1/dir2/dir3	• change current directory to "dir3"
$ ls	• list files and directories
$ ls -F	• list files and directories (details)
$ ls -l	• list files in "long" format (file info)
$ ls -t	• list files by date (time); newest to oldest
$ ls -l -t	• detailed time ordered list
$ ls -lt	• detailed time ordered list
$ ls –lh	• "human readable" listing

Try Out Some Commands -
Open Files and Web Browser

$ start *some_text_file*

- open "some text file" in default editor

$ start notepad ++ *some_text_file*

- Open "some text file" in Notepad++ editor

$ start *some_image_file*

- Open "some image file" in default image viewer

$ start iexplore

- Start Internet Explorer

$ start iexplore *some_website*

- Open website

$ start chrome

- Start Google Chrome

$ start chrome *some_website*

- Open website

$ start chrome *https://github.com/jlant-usgs*

Next meeting

- **More Unix commands**
  - Creating and deleting
  - Pipes and filters