Part 1: Copy a bedGraph file to your home directory and inspect it

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Goal: Help you familiarize yourself with the unix computing environment by performing some basic tasks and troubleshooting things on your own.

What you get to do:

1. Log onto the Short Read Workshop server using SSH
2. Move to your user directory on */scratch/Users/*
3. Make a folder called *workshop-day2* and a folder inside of that called *bedfiles*
4. Make folders inside *workshop-day2* called *results*, *scripts*, *bin*, and *data*
5. Copy the gzipped (compressed) folder in */scratch/Shares/public/sread2023/data_files/day2/bedfiles/chr1_bedfiles.tar.gz* to your *bedfiles* directory
    - Things are gzipped (compressed) if they contain large files or information to save space until you actually need them (think of it as putting stuff in vacuum storage bags)
6. Decompress and extract the *chr1_bedfiles.tar.gz* folder in your *bedfiles* directory
    - *Hint*: check out the common commands for *Working with Files* below and don't forget about the **man** command which can help you learn more about a command
7. Look at the format of the extracted files. What kind of information do these files give you?

Some help/encouragement:

If you don't know how to do something, don't be discouraged! Look at the documentation we've provided below or search the internet for how to do what you're trying to accomplish.

Some useful commands and tools:

- Basic Utilities:
    - **man** (manual) followed by the name of a command will tell you how to use a command
        - This might seem overwhelming at first because it includes everything but getting used to learning how to read this is really helpful
        - type q or click "esc" to escape from man mode
    - **ssh** lets you log into a remote server like the one we're using during the short read workshop
    - **whoami** will print your current active user
    - **uname-n** This is useful to make sure you're actually on the short read server and not your local machine
- Navigating Around:
    - **pwd** (print working directory) will tell you which directory you're in
    - **cd** (change directory) lets you move to a different directory. You can move folders using absolute or relative paths. For example, if you're starting in /scratch/ and you want to

be in the Workshop directory inside of it, typing cd /scratch/Workshop will move you using the absolute path and typing cd Workshop will move you using the *relative path*

- Reelative paths have some shortcuts .. (two dots) means "the directory immediately above the one that I'm in" and . (one dot) means "the directory that I'm in"

- o **ls** (list) prints out information about the directory that you're in
- Working with Files:
    - o **mv** (move) moves a file from a source path to a destination path
    - o **cp** (copy) copies a file from a source path to a destination path
    - o **rm** (remove) removes a file or directory. **WARNING** there is no recycle bin on a unix system. If you remove a file it is gone forever, with no chance of recovery. **DOUBLE CHECK YOUR COMMANDS**
    - o **zip/unzip** allows you to create and extract .zip archive files
    - o **tar** (tape archive) allows you to create and extract archive files that have the extension of .tar, .tar.xz, .tar.gz, and more.
    - o **less** allows you to view files on the command line without editing them
    - o **cat** (concatenate) prints out the contents of a file directly to your terminal
    - o **head/tail** show you the first and last 10 lines of a file, respectively. These are useful for quickly making sure a file is in the right format
    - o **vim** is an advanced text editor that allows you to edit files for writing scripts. **nano** is a simpler text editor for writing scripts on the command line