Basic Linux Command Cheat Sheet

Command	Function	General Usage
pwd	print the present working directory	`pwd`
cd	change directories	`cd /path/to/directory`
ls	list segements or	`ls <options> <optional path>`
du	Calculate total size of directories	`du <options> /path/to/directory`
man	Read manuals for Linux programs and functions	`man programName`
chmod	Change permissions of which users and groups can access data and directories	`chmod <int or alph permissions> /path/to/file/or/directory`
chown	change ownership of files/directories or change group ownership of files/directories	`chown <owner:group>`
less	Opens a file for reading/viewing only and allows scrolling	`less /path/to/file/myFile.txt`
nano	Text editor; allows you to read, modify,and create new files	`nano myNewFile.txt` OR `nano myExisitingFile.txt`
head	Prints the first 10 lines of a file	`head <options> /path/to/myFile.txt`
tail	Prints the last 10 lines of a file	`tail <options> /path/to/myFile.txt`
wc	Calculates the word count of a file	`wc <options> /path/to/myFile.txt`
grep	Searches for patterns in text files	`grep <options> "myPattern" /path/to/myFiles.txt`
>	The redirection symbol to write standard out to a file. Careful! Will overwrite an existing file	`myProgram > myOutput.txt`
>>	The redirection with append symbol to append standard out to the end of an existing file. If file does not exist, it will be created	`myProgram >> myOutput.txt`
|	The pipe symbols to connect multiple programs together in one call. Ex: Take the output of program 1 and input it as the input of program 2	`program1 | program 2`
mkdir	Make a new directory	`mkdir myNewDirectory`
cp	Make a copy of a file or directory (need -R option for copying directory) Careful! If file or directory exists, it will overwrite!	`cp <options> /path/to/directory/file/to/copy / /path/to/destination/to/copy`

mv	Move a file or directory (need -R option for moving directory) Careful! If file or directory exists, it will overwrite!	`mv <options> /path/to/directory/file/to/copy / /path/to/destination/to/copy`
tar	Compress or decompress a directory for file	`tar <options> file.tar`
sftp	Secure file transfer protocol to copy data into and out of Wilkins/Rosalind environment	`sftp username@address`
get	Sftp command to pull data down to login site	`get /path/to/file/to/download`
put	Sftp command to push data into a remote site	`put /path/to/file/to/upload`
unzip	Command to unzip a .zip file	`unzip myFile.zip`
rm	Remove or delete files and directories (-r required for directories) Caution! Once rm is used, file/directory is permanently deleted!	`rm <options> /path/to/myFile/or/directory`
time	Function to put in front to any program to calculate the time it takes to run and the number of core-hours used	`time myProgram`
sleep	Function that stalls/pauses a program for n seconds before running the next command	`sleep seconds`

Basic SLURM Command Cheat Sheet

Command	Function	General Usage
sbatch	Submit a batch script to SLURM	`sbatch <options> myScript.sh`
sinfo	Get information about nodes and queues available on HPC	`sinfo <options>`
squeue	Check job status in line	`squeue <options>`
sstat	Get statistics of currently running jobs	`sstat <options> myCurrentRunningJobID`
sacct	Get summary of all jobs run, submitted, canceled in the day	`sacct <options>`
scancel	Cancel a currently running or pending job in the queue	`scancel <options> myJobID`

Contact Information

email: CCPM-Rosalind@ucdenver.edu
website: www.ucdenver.edu/Rosalind
github: github.com/tbrunetti/Rosalind_HPC