BCBGSO Basic UNIX Workshop Reference Sheet

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| Command | What it does |
| ssh <your-netid>@training.las.iastate.edu | Logs into the server through SecureShell |
| bash | Open Bash Shell |
| git clone https://github.com/cmmann/basic-unix-workshop.git | Clone the workshop files to your workspace |
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| Tips and Tricks |  |
| **[Up]** Arrow | Previous Command |
| **[Down]** Arrow | Next Command |
| **[Ctrl]**+**[C]** | Stop command execution |
| **[Tab]** | autofill name |
| history | display history |
| man <commandname> | Display the manual and options for <commandname> |
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| Lesson 1: Navigation |  |
| pwd | Display present working directory path |
| ls | list files and folders in present working directory |
| ls -a | list all files and folders, including hidden |
| ls -l | list long format files and folders - extra info displayed |
| ls -R | list files recursively - including files buried in folders |
| ls -S | list files ordered by size |
| cd <directory-name> | change directory to directory name |
| cd .. | change directory up one level |
| cd ~ | change directory to home directory |
| cd - | change back to previous directory |
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| Lesson 2: |  |
| mkdir <directory-name> | Create a new directory called <directory-name> |
| mkdir -p </path/to/new/directory/> | Create all directories in path to <directory> |
| touch <filename> | Create a file called <filename> if <filename> doesn't exist |
| rm <filename> | Delete <filename> |
| rm -r <directory-name> | Delete <directory-name> and all its contents |
| rm \* | Delete everything in the current directory |
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| Lesson 3: |  |
| cp <source-file> <destination/name> | copies <source-file> to <destination> and names the new copy <name> |
| mv <source-file> <destination/name> | moves <source-file> to <destination> and names it <name> |
| mv <source-file> <new-name> | renames <source-file> to <new-name> |
| mv -r <source-directory> <destination/folder/> | moves <source-directory> and all its contents to <folder> |
| cat <filename> | prints out the contents of filename to the terminal |
| head -n <filename> | prints out the first n lines of <filename>; if n is unspecified, default is 10 |
| tail -n <filename> | prints out the last n lines of <filename>; if n is unspecified, default is 10 |
| less <filename> | open' <filename> in console - allows you to scroll |
| q | quit out of the less display |
| bash path/to/scriptname.sh | Run <scriptname.sh> |
|  |  |
| Lesson 4: |  |
| find <search-space> <criteria> | Search <search-space> for things matching <criteria> |
| find <search-space> -iname \*.txt | Search <search-space> for all files/folders ending in '.txt' |
| find <search-space> -iname \*text\* -type -f | Search <search-space> for filenames containing 'text' |
| find . -iname \*text\* -type -d | Search the current directory for folder names containing 'text' |
| chmod <permission> <filename> | Set <filename> permissions to <permission> |
| chmod <group> +<permission> <filename> | Set <filename> permissions for <group> to <permission> |
| 4 OR +r | Set permission: Read |
| 2 OR +w | Set permission: Write |
| 1 OR +x | Set permission: Execute |
| 4+2 = 6 OR +rw | Set permission: Read/Write |
| 4+2+1 = 7 OR +rwx | Set permission: Read/Write/Execute |
| u +<permission> | Set permission for: User |
| g +<permission> | Set permission for: Group |
| o +<permission> | Set permission for: Others/Global |
| a +<permission> OR +<permission> | Set permission: All |

Miscellaneous:

. Current directory  
/ all directories  
.. Directory one level above you  
\* any