

Simple Unix Commands

File System

- *pwd* – print working directory
- *ls* – list directory contents
 - *-a* – Shows you all files, even files that are hidden
 - *-l* – Shows you huge amounts of information (permissions, owners, size, and when last modified.)

File System

- *cd* – change directory
 - *directory* - Name of the directory user wishes to enter.
 - *cd ..* - Used to go back one directory on the majority of all Unix shells.
 - *~* - Home directory.

File System

- *cp* – copy files and directories
 - *-r* – copy directory recursively
- *mv* – move (rename) files
 - *-i* – interactive, prompt before overwrite
 - *-f* – force, do not prompt before overwriting (default)

File System

- *rm* – remove files or directories
 - *-i* – interactive, prompt before any removal
 - *-f* – ignore non-existent files, never prompt
 - *-r* – remove directories and their contents recursively
- *mkdir* – make a directory
- *rmdir* – remove a directory

Text Editor

- *vi, vim (vi improved)* – text editors
 - *Create a file*
 - *Browse the file*
 - *Modes: input mode & command mode*
 - *Edit the file (insert, copy, paste, delete, save)*

Text Editor

- *Edit the file (insert, copy, paste, delete, save)*
 - *i, I, a, A, o, O* (insert, append, open line)
 - **<Esc>** (enter command mode)
 - All commands listed below used in command mode
 - *h, l, j, k, -, +* (move the cursor)
 - **Arrow-keys** can also be used to move the cursor
 - **x, dd** (delete)
 - *:u, :w, :q, :wq, :q!* (save, and quit)
 - *v* (select)
 - *y, p* (copy, and paste)
- *Must-know operations highlighted in red*

Path Setting

- `java -version`
- `echo $PATH`
- For C shell
 - Open `.cshrc` file (`vi .cshrc`)
 - Edit
 - `set path = (/usr/java/bin /bin /usr/bin /usr/local/bin ...)`
 - `setenv JAVA_HOME /usr/java`
 - `setenv CLASSPATH ./usr/java`
 - `source .cshrc`

Path Setting (in bash)

- For bash,
- edit the startup file (~/.bashrc):
 - set path=(/usr/java/bin /bin /usr/bin /usr/local/bin ...)
 - setenv JAVA_HOME /usr/java
 - setenv CLASSPATH ./usr/java
 - export PATH

More info:

<http://java.sun.com/docs/books/tutorial/essential/environment/paths.html>

Java

- *javac* – Java compiler
- *java* – Java application launcher
 - *A small example with the "Hello World!" program*

I/O Redirection

- Standard Input
 - `program < file1`
 - `$ wc /etc/passwd`
 - `20 23 726 /etc/passwd`

I/O Redirection

Standard Output

- `program > file1`
 - `$ ls > directory.out`
- `program >! file1` (override)
- `program >> file1` (append)

Look for help

- *man command*
- *man -a cmd*
- *man -aw cmd*