


Linux/Unix basic commands

Basic command structure: `command` `-[options]` `some_argument`

<code>ls [-l, -rt, -h]</code>	List contents in the directory
<code>mkdir</code>	Make a new directory
<code>cd [directory]</code>	Change into a directory
<code>man [command_name]</code>	Open the manual for a command
<code>cp [-r]</code>	Copy file (or a directory with <code>-r</code>)
<code>mv</code>	Move/Rename file or directory
<code>rm [-r]</code>	Remove a file (or a directory with <code>-r</code>)

The logo for the Center for Scientific Computing (CSC) at the University of California Santa Barbara. It features the letters 'CSC' in a bold, italicized, white sans-serif font.A dark blue banner with a futuristic, abstract background of light trails and glowing points. The text 'UNIVERSITY OF CALIFORNIA SANTA BARBARA' and 'CENTER FOR SCIENTIFIC COMPUTING' is displayed in a small, white, sans-serif font on the right side.


UNIVERSITY OF CALIFORNIA SANTA BARBARA
CENTER FOR SCIENTIFIC COMPUTING

Linux/Unix basic commands

<code>pwd</code>	Show the full path of current directory
<code>cat [file]</code>	View file, scrolling
<code>more</code>	View file, one screen at a time
<code>less</code>	Like more, more features
<code>diff [file1] [file2]</code>	Display differences between file1 & file2
<code>grep 'pattern' file</code>	Find a regular expression in a file

Example: Look for the pattern PBS in a file submit.job

```
$ grep 'PBS' submit.job
-->
$ #PBS -l nodes=1:ppn=4
$ #PBS -l walltime=2:00:00
```

The logo for the Center for Scientific Computing (CSC) at the University of California Santa Barbara, featuring the letters 'CSC' in a stylized, italicized font.A banner for the University of California Santa Barbara Center for Scientific Computing. It features a dark background with a blue and green light effect. The text 'UNIVERSITY OF CALIFORNIA SANTA BARBARA' and 'CENTER FOR SCIENTIFIC COMPUTING' is displayed in white, uppercase letters on the right side.

UNIVERSITY OF CALIFORNIA SANTA BARBARA
CENTER FOR SCIENTIFIC COMPUTING

Pipes and redirection

Very useful feature of the command line.

<code>command > file</code>	Redirect output of command to a file
<code>command >> file</code>	Redirect to file, append
<code>command < file1 > file2</code>	Get input from file1, direct output to file2
<code>command1 command2</code>	Pipe output of command1 to command2

Example: Take input from a data file, run an executable, and print to an output file

```
$ test.x < data.input > data.output
```

