

Shell Basics

z shell prompt

```
user@host~: %
```

bash prompt

```
host:~user$
```

End the session

```
exit
```

```
[CTRL D]
```

Interrupt a process

```
[CTRL C]
```

Clear the screen (hides but does not delete history)

```
clear
```

```
[CTRL L]
```

Display previously used commands

```
history
```

Autocomplete a command, file, or directory name

```
[TAB]
```

Access previously used command

```
[UP ARROW] and [DOWN ARROW]
```

Jump to beginning of line

```
[CTRL A]
```

Jump to end of line

```
[CTRL E]
```

Delete from cursor to end of line

```
[CTRL K]
```

Delete one word backwards

```
[CTRL W]
```

Navigating Directories

Display **working directory**

`pwd`

`~` A shortcut for the **home directory**

`~/dir2`

`.` A shortcut for the **working directory**

Change **working directory** (absolute path)

`cd /dir1/dir2`

Change **working directory** (relative path from **dir1**)

`cd dir2`

Change **working directory** (to home directory)

`cd`

Change **working directory** (to home directory)

`cd ~`

Change **working directory** (to parent directory)

`cd ..`

Change **working directory** (to previous working directory)

`cd -`

List Directory Contents

Note: All directories and files can be referred to by **path** or by **name**. By default, the working directory will be shown if no path is given.

List contents of **working directory**

```
ls
```

List contents of directory (absolute path)

```
ls /Users/codey/Documents
```

List *all* contents of directory (includes hidden files)

```
ls -a directory-name
```

List contents of directory (in long format)

```
ls -l directory-name
```

List *all* contents of directory (in long format)

```
ls -la directory-name
```

List *all* contents of directory (in reverse order)

```
ls -r
```

Create Files

Note: Files can be referred to by **path** or by **name**.

Update modification timestamp of (with file name)

```
touch file-name
```

Create a file (if the file does not exist)

```
touch file-name
```

Display file information (with file name)

```
file file-name
```

Create and open a file with the text editor **vim**

```
vim file-name
```

Displaying Files

Display contents of **file1**

```
cat file1
```

Display contents of **file1** and **file2**

```
cat file1 file2
```

Display *first* 10 lines of **file1**

```
head file1
```

Display *first* 5 lines of **file1**

```
head -n 5 file1
```

Display *last* 10 lines of **file1**

```
tail file1
```

Display *last* 5 lines of **file1**

```
tail -n 5 file1
```

Display contents of **file1** with navigation options

```
less file1
```

Shortcuts for **less**

Scroll with: [PAGEUP] [PAGEDOWN] [UP ARROW] [DOWN ARROW]

h	help	g	top file	/keyword	search for keyword
q	quit	G	end of file		

Redirection

Append output to end file (does not overwrite)

```
>>
```

Overwrite file with output

```
>
```

Copying files

Note: If a file exists, it will be overwritten. Use options to set desired behavior.

Copy the contents of **file1** to **file2**

```
cp file1 file2
```

Copy the contents of **file1** to **file2** and show file names as they are copied

```
cp -v file1 file2
```

Copy the contents of **file1** to **file2** but do not overwrite **file2** if it exists

```
cp -n file1 file2
```

Copy the contents of **file1** to **file2** and display confirmation to overwrite **file2** if it exists

```
cp -i file1 file2
```

Moving and renaming files

Move a file to a specified directory (by name or path)

```
mv file-name directory-name/
```

Rename **file1** to **file2**

```
mv file1 file2
```

Remove a file

```
rm file-name
```

Remove a file *with* confirmation prompt

```
rm -i file-name
```

Remove a file *without* confirmation prompt

```
rm -f file-name
```

Remove files *recursively* (used to remove all contents of a directory)

```
rm -r file-name
```

[**-R** may also be used]

Creating directories

Note: Files can be referred to by **path** or by **name**. By default, directories will be created in the **working directory**.

Create a directory

```
mkdir dir1
```

Create multiple directories

```
mkdir dirA dirB dirC
```

Create a directory and its *intermediate* directories

```
mkdir -p /dir1/dir2/dir3
```

Create directories and list them

```
mkdir -v dirA dirB
```

Removing Directories

Remove a directory

```
rmdir directory-name
```

Remove directories and list them

```
rmdir -v dirA dirB
```

Remove directories using **rm** (use **-r** to do this recursively)

```
rm -r dirA
```

