

Unix Command Line Cheat Sheet

Files and Directories

Doing things:

| | |
|------------|-------------------------|
| cd | change directory |
| ls | list |
| pwd | print working directory |
| mv | move |
| rm | remove |
| cp | copy |

The lingo:

| | |
|-----------|--------------------|
| \ | root directory |
| ~ | home directory |
| . | this directory |
| .. | one directory back |
| * | wild card |

Tips 'n tricks:

| | |
|-----------------|---------------------------------|
| TAB | tab completion |
| man -- | see the manual for that command |
| ^A | beginning of line |
| ^E | end of line |
| ^U | delete whole line |
| PS1='\$' | reduce prompt to just \$ |
| clear | clean workspace (keeps history) |
| ^C | ABORT/CANCEL |

A bit more advanced

| | |
|----------------|-------------------------|
| head | the beginning of a file |
| tail | the end of a file |
| echo | print on screen |
| wc | word count |
| sort | sort |
| history | print history |

Pipes and filters

| | |
|-------------|----------|
| > | redirect |
| | pipe |

Examples:

```
sort -n lengths.txt > sorted-lengths.txt
wc -l *.txt | sort -n | head -5
```

Looking at files in command line

| | |
|-------------|--|
| cat | concatenates contents line by line, printing |
| more | shows file and takes back to command line |
| less | shows file in whole window |

NANO - simplest text editor

| | |
|-----------|-----------|
| ^o | write out |
| ^x | exit |
| ^k | cut |
| ^w | find |

Searching

| | |
|-------------|------|
| grep | grep |
| find | find |

Examples:

```
grep -n -w "the" haiku.txt
find . -name '*.txt'
grep "FE" $(find .. -name '*.pdb')
```

Loops

```
for datafile in *[AB].txt; do echo $datafile stats-$datafile; done
```

Variations on these themes

list

| | |
|--------------|--------------------------------------|
| ls -a | list even files starting with . |
| ls -l | list in long format (includes dates) |
| ls -F | list with slash after directories |

wc

| | |
|--------------|--------------------------|
| wc -l | count lines in file |
| wc -w | count words in file |
| wc -c | count characters in file |

Shell scripting

| | |
|------------------------|--------------------------------|
| # | starts comment lines |
| \$1 or \$2 etc. | indicates arguments to use |
| \$@ | indicates to use all arguments |

BONUS

| | |
|------------|------|
| cut | cuts |
| sed | seds |
| awk | awks |

This is a command line cheat sheet made February 2016 for Gerstner Sloan Kettering Graduate Students. It is still a work in progress. And remember Googling is your friend!