

# UNIX Command-Line Cheat Sheet

## Bioinformatics Course

File system Commands	
<b>ls</b>	lists directories and files
<b>ls -a</b>	lists all files including hidden files
<b>ls -lh</b>	formatted list including more data
<b>ls -t</b>	lists sorted by date
<b>pwd</b>	returns path to working directory
<b>cd dir</b>	changes directory
<b>cd ..</b>	goes to parent directory
<b>cd /</b>	goes to root directory
<b>cd</b>	goes to home directory
<b>touch file_name</b>	creates an empty file
<b>cp file file_copy</b>	copy a file
<b>cp -r</b>	copy files contained in directories
<b>rm file</b>	deletes a file
<b>rm -r dir</b>	deletes a directory and its files
<b>mv file1 file2</b>	moves or renames a file
<b>mkdir dir_name</b>	creates a directory
<b>rmdir dir_name</b>	deletes a directory
<b>locate file_name</b>	searches a file
<b>man command</b>	shows commands manual
<b>top</b>	shows process activity
<b>df -h</b>	shows disk space info
<b>apt-get install</b>	installs applications in linux

Compression commands	
<b>gzip/zip</b>	compress a file
<b>gunzip/unzip</b>	decompress a file
<b>tar -cvf</b>	groups files
<b>tar -xvf</b>	ungroups files
<b>tar -zcvf</b>	groups and gzip files
<b>tar -zxvf</b>	gunzip and ungroups files

Text handling commands	
<b>command &gt; file</b>	saves STDOUT in a file
<b>command &gt;&gt; file</b>	appends STDOUT in a file
<b>cat file</b>	concatenate and print files
<b>cat file1 file2 &gt; file3</b>	merges files 1 and 2 into file3
<b>cat *fasta &gt; all.fasta</b>	concatenates all fasta files in the current directory
<b>head file</b>	prints first lines from a file
<b>head -n 5 file</b>	prints first five lines from a file
<b>tail file</b>	prints last lines from a file
<b>tail -n 5 file</b>	prints last five lines from a file
<b>less file</b>	view a file
<b>less -N file</b>	includes line numbers
<b>less -S file</b>	wraps long lines
<b>grep 'pattern' file</b>	Prints lines matching a pattern
<b>grep -c 'pattern' file</b>	counts lines matching a pattern
<b>cut -f 1,3 file</b>	retrieves data from selected columns in a tab-delimited file
<b>sort file</b>	sorts lines from a file
<b>sort -u file</b>	sorts and return unique lines
<b>uniq -c file</b>	filters adjacent repeated lines
<b>wc file</b>	counts lines, words and bytes
<b>paste file1 file2</b>	concatenates the lines of input files
<b>paste -d “,”</b>	concatenates the lines of input files by commas
<b>sed</b>	transforms text

Networking Commands	
<b>wget URL</b>	download a file from an URL
<b>ssh user@server</b>	connects to a server
<b>scp</b>	copy files between computers