# Linux Command line cheat sheet

BTI-SGN Bioinformatics course, 2nd edition (2013)

## File system Commands

| Command | Description |
|---|---|
| **ls** | lists directories and files |
| **ls** -a | lists all files including hidden files |
| **ls** -lh | formatted list including more data |
| **ls** -t | lists sorted by date |
| **pwd** | return current working dir |
| **cd** *dir* | changes directory |
| **cd** .. | goes to parent directory |
| **cd** / | goes to root directory |
| **cd** | goes to home directory |
| **touch** *file_name* | creates en empty file |
| **cp** *file file_copy* | copy a file |
| **cp** -r | copy files contained in directories |
| **rm** *file* | deletes a file |
| **mv** *file1 file2* | moves or renames a file |
| **rename** *regexp files* | renames multiple files |
| **mkdir** *dir_name* | creates a directory |
| **rmdir** *dir_name* | deletes a directory |
| **locate** *file_name* | searches a file |
| **man** *command* | shows commands manual |
| **top** | shows process activity |
| **df** -h | shows disk space info |
| **free** -m | shows available RAM in megabytes |
| **kill** *process_id* | stops a process |

## Compression commands

| Command | Description |
|---|---|
| **gzip** | compress a file (faster) |
| **gunzip** | decompress a file |
| **bzip2** | compress a file (better compression) |
| **bunzip2** | decompress a file |
| **pbzip2** | compress a file (better compression with several cores) |
| **pbzip2** -d | decompress a file |
| **tar** -cvf | groups files |
| **tar** -xvf | ungroups files |

## Text handling commands

| Command | Description |
|---|---|
| > *file* | saves STDOUT in a file |
| >> *file* | appends STDOUT in a file |
| **cat** *file* | concatenate and print files |
| **cat** *file1 file2 > file3* | merges files 1 and 2 into *file3* |
| **cat** *file* | merges files 1 and 2 into *file3* |
| **cat** *fasta > all.fasta | concatenates all fasta files in the current directory |
| **head** *file* | prints first lines from a file |
| **head** -n 5 *file* | prints first five lines from a file |
| **tail** *file* | prints last lines from a file |
| **tail** -n 5 *file* | prints last five lines from a file |
| **less** *file* | view a file |
| **less** -N *file* | includes line numbers |
| **less** -S *file* | chops long lines |
| **grep** '*pattern' file* | Prints lines matching a pattern |
| **grep** -c '*pattern' file* | counts lines matching a pattern |
| **cut** -f 1,3 *file* | retrieves data from selected column in a tab-delimited file |
| **sort** *file* | sorts lines from a *file* |
| **sort** -u *file* | sorts and return unique lines |
| **uniq** *file* | filters adjacent repeated lines |
| **wc** *file* | counts lines, words and bytes |
| **paste** *file1 file2* | concatenates the lines of input files |
| **paste** -d "," | concatenates the lines of input files by commas |
| **join** *file1 file2* | joins input files by a common id |
| **sed** | transforms text |
| **awk** | pattern scanning and processing language |

## Networking Commands

| Command | Description |
|---|---|
| **wget** *URL* | download a file from an URL |
| **ssh** *user@server* | connects to a server |
| **scp** | copy files between computers |
| **ping** | check connection to a host |
| **apt-get** install | installs applications in linux |