#Notes Lecture 04 | Manipulating files and directories ##Creating directories

- mkdir is used for creating a single directory or multiple directories
- to create multiple directories, separate each directory name with a space
- You can create directories in the present working directory or in a different directory by using an absolute path or relative path ##Creating files
- touch command is used for creating files
- Create a file called list - touch list ##Deleting files and directories ###rm command
- rm removes files
- rm by default does not remove directories. To remove a directory use rm with -r option
- In linux and other Nix systems you cannot remove non empty directories
- To remove empty directories use the rmdir command
- To remove non-empty directories use rm -r + directory name or directory absolute path ##Moving files and directories ###The mv command
- mv moves and renames directories
- The basic formula of the mv command is:
    - mv + source + destination
- Where source is the file or directory that you want to move and destination is where the directory or file is going
- Both source and destination can be an absolute path or relative path ##Copying files and directories ###The cp command
- cp copies files/directories from source to a destination
- The cp command uses the same structure as the mv command
    - cp + files to copy + destination
- To copy directories you must use the -r option
    - cp -r + directory to copy + destination ##Getting Help
- Man pages are documentation files that describe Linux shell commands, executable programs, system calls, special files, and so forth
- Man Pages are quick references
- To view a man page type: man + command
- To exit the man page press letter "q"
- Most commands have a help a help option built in. Normally that option is -h or --h or --help
- Some commands my not have a man page but an info page
- You can use the whatis command to display a simple description of what a command does ##Working with Wildcards
- Wildcard represent letters and characters used to specify a filename for searches
- File globbing is the processing of pattern matching using wildcards
- The wildcards are officially called metacharater wildcards ###The * Wildcard
- The main wildcard is a star, or asterisk (*) character
- A start alone matches anything and nothing and matches any number of charaters ###The ? Wildcard
- The ? wildcard metacharacter matches precisely one character
- In addition, the question mark proves very useful when working with hidden files
- If you want to list all hidden files you can use: ls ..??* which will match all files that start with a . or .. abd have any character after it. ☐ Wildcard
- The brackets wildcard match a single character in a range

- The brackets wildcard wildcard use the exclamation mark to reverse the match.For example, match everything except the vowels [!aeiou] or any other character except numbers [!0-9] ###Brace Expansion
- Brace expansion {} is not a wildcard but another feature of bash that allows you to generate arbitrary strings to use with commands