Notes 6

Wildcard	definition	example
`*`	matches 0 to any number of characters	`ls ~/Downloads/*.png`
`?`	matches 1 character	`ls ~/Downloads/f?ll.sh`
`[]`	matches 1 character from a set	`ls ~/Downloads/f[0-9]ll.sh`

* Wildcard

- Matches 0 to any number of characters

Examples:

- list all the files that end in .txt:
  - `ls *.txt`
- list all the files that end in .txt & .pdf:
  - `ls *.txt *.pdf`
- list all the files that have any letter before the string "file." and after as well:
  - `ls *file.*`

? Wildcard

- Matches precisely one character

Examples:

- list all hidden files:
  - `ls .??*`
- list all hidden files in the current directory:
  - `ls ./.??*`
- list all the files that have a 3 letter file extension:
  - `ls *.???`

[] Wildcard

- Matches a single character in a range

Examples:

- To match all files that have a vowel after letter f:
  - `ls f[aeiou]*`
- To match all files whose name has at least one number:
  - `ls *[0-9]*`
- To match all the files whose name does not have a number in their file name:

    - `ls *[!0-9].*`

Brace Expansion

- Not a wildcard but another feature of bash that allows you to generate arbitrary strings to use with commands.

Examples:

- To create a whole directory structure in a single command:
    - `mkdir -p music/{jazz,rock}/{mp3files,videos,oggfiles}/new{1..3}`
- To create a N number of files use:
    - `touch website{1..5}.html`
- To remove multiple files in a single directory:
    - `rm -r {dir1,dir2,dir3,file.txt,file.py}`