Week Report 6

Wildcards

* Wildcard

the * wildcard matches from 0 to any number of characters.

- Examples:
  - List all the text file in a directory
    - `ls *.txt`
  - List all the files that start with the word file
    - `ls file*`
  - Copy all the mp4 files
    - `cp Downloads/*.mp4 ~/Videos/Movies/`

? Wildcard

The ? wildcard matches a single character.

- Examples:
  - list all the files that have 3 characters and are followed by the word file in the name
    - `ls ???File*`
  - list all the files with a three-letter extension in a directory
    - `ls *.???`
  - list all files that have x as the second letter in their name
    - `ls ?x*`

[] Wildcard

The [] wildcard matches any single character inside the brackets

- Examples:
  - list all the files that have either "a" or "b" as the first character in their name
    - `ls [ab]*`
  - list all the files that have a single digit number as the second letter in their name
    - `ls ?[0-9]*`
  - list all the files that have either an uppercase or lowercase letter as the second character in their names
    - `ls ?[[:alpha:]]*`

Brace Expansion

Brace expansion allows you to generate multiple strings based on a pattern.

- Examples:
  - create directories named "dir1", "dir2", "dir3", "dir4", and "dir5"
    - mkdir dir{1..5}

- copy "file1.txt", "file2.txt", "file3.txt", "file4.txt", and "file5.txt" to backup directory
  - cp file{1..5}.txt backup/
- Create the directories "project1/docs", "project1/src", "project2/docs", "project2/src","project3/docs", and "project3/src"
  - mkdir project{1..3}/{docs/src}