Notes 4

Wildcards

* Wildcard

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

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

? Wildcard

the ? wildcard matches only one character

- Examples:
    - list all hidden files in current directory
        - 'ls ./.??* '
    - list all hidden files in the parent directory
        - 'ls ../.??* '
    - list all files that have two characters between letter b and k
        - 'ls b??k* '

[] Wildcard

the {} wildcard match a single character in a range

- Examples:
    - match all files that have a vowel after letter f
        - 'ls f[aeiou]* '
    - match all files that do not have a vowel after letter f
        - 'ls f[!aeiou]* '
    - match all files whose name begins with any 3 combinations of numbers and the current user's username
        - 'ls [0-9][0-9][0-9]$USER '

Brace Expansion

Brace expansion is not a wildcard but another feature of bash that allows you to generate arbitrary strings to use with commands.

- Examples:
    - create a whole directory structure in a single command

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