wr6.md 5/9/2023

# Week Report 6

## Wildcards

## \* Wildcard

The \* (asterisk) 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? (question mark) wildcard matches precisely one character

- Examples:
  - List all hidden files
    - ls .??\*
  - List all hidden files in the parent directory
    - ls ../.??\*
  - List all the files that have a 3 letter file extension
    - ls \*.???
- Wildcard
- (brackets) wildcard match a single character in a range. Add the exclamation mark to reverse the match.
  - Examples:
    - Match all files that have a vowel after letter f
      - ls f[aeiou]\*
    - Match all files whose name has at least one number
      - ls \*[0-9]\*
    - Match all files whose name begins with any of these two sets of characters: letters from a-f or p-z
      - ls [a-fp-z]\*

### **Brace Expansion**

Brace expansions {} is not a wildcard nut has 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

wr6.md 5/9/2023

- mkdir -p music/{jazz,rock}/{mp3files,videos,oggfiles}/new{1..3}
- Create a 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}