* Wildcard

Definition:

A star alone matches anything and nothing and matches any number of characters

Example:

- `ls *.txt` lists all the files that end in .txt
- `ls *.txt *.pdf` lists all the files that end in .txt and .pdf
- `ls file.*` lists all the files that start with the string "file." regardless of their file extension

? WIldcard

Definition:

Matches precisely one character

Example:

- `ls ./.??*` lists all the hidden files in the current directory
- `ls b??k*` lists all the files that have 2 characters between letters b and k
- `ls *.???` lists all the files that have a 3 letter file extension

[] Wildcard

Definition:

The brackets wildcard match a single character in a range

Example:

- `ls f[aeiou]*` matches all files that have a vowel after letter f
- `ls f[!aeiou]*` matches all files that do not have vowel after letter f
- `ls f[a-z]*` matches all files that have a range of letters after f

{} Brace Expansion

Definition:

Is not a wildcard but another feature of bash that allows you to generate arbitrary strings to use with commands

Example:

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