

Notes 6

* (Star/Asterisk) Wildcard

- **Usage**
 - Used to match 0 to any number of characters.
- **Examples**
 - List all of the directories inside a given directory without listing their content.
 - `ls -ld wildcard_extra_practice/*/`
 - Move all the .sh files.
 - `mv wildcard_practice/*.sh wildcard_practice/scripts/`
 - List all files in the Downloads directory that has the .png file extension.
 - `ls ~/Downloads/*.png`

? (Question Mark) Wildcard

- **Usage**
 - Used to match 1 character.
- **Examples**
 - List all the files that contain a 4 letter file extension.
 - `ls -lX wildcard_practice/*.????`
 - List all the files that contain a 2 letter file extension and starts with letter j.
 - `ls -lX wildcard_practice/j*.??`
 - List all the Microsoft Office 365 files/
 - `ls -lX wildcard_practice/*.???x`

[] (Square Brackets) Wildcard

- **Usage**
 - Used to match 1 character from a set.
- **Examples**
 - List all the files that start with a capital letter.
 - `ls wildcard_practice/[A-Z]*`
 - List all the files that contain a number in their name.
 - `ls wildcard_practice/[0-9]`
 - List all the files with a year in the name in yyyy format.
 - `ls [0-9][0-9][0-9][0-9]*`

Table

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

{ } (Brace Expansion)

- **Usage**
 - Used 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 an N number of files.
 - `touch website{1-5}.html`
 - `touch file{A-Z}.txt`
 - Remove multiple files in a single directory
 - `rm -r {dir1,dir2,dir3,file.txt,file.py}`