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Notes 6

The * Wildcard

Description

• The * wildcard matches any number of characters.

Examples

• List all of the directories inside a given directory without listing their content:

```
• ls -1d wildcard extra practice/*/
```

• Move all the .sh (shell scripts) files:

```
• mv wildcard extra practice/*.sh wildcard extra practice/scripts/
```

• Creates directory, list, and move all the images files in the wildcard_extra_practice directory:

```
mkdir wildcard_extra_practice/images/
ls wildcard_extra_practice/img-*.*
mv -v wildcard extra practice/img-*.*images/
```

The? Wildcard

Description

• The ? wildcard matches precisely on character and proves very useful when working with hidden files.

Examples

• List all the files that contain a 4 letter file extension:

```
• ls -1X wildcard extra practice/*.????
```

• List all the files that contain a 4 letter file extension and start with letter Z:

```
• ls -1X wildcard extra practice/z*.????
```

• List all the files Microsoft Office 365 files:

```
• ls -1X Wildcard extra practice/*.???x
```

The [] Wildcard

Description

• Brackets wildcard match a single character in a range and uses an exclamation mark to reverse the match.

Examples

• To match all files that have a vowel after letter f:

```
• ls f[aeiou]*
```

• To match all files that do not have vowel after letter f:

```
• ls f[!aeiou]*
```

• To match all files that have a range of letters after f:

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```
• ls f[a-z]*
```

• To match all files whose name has at least one number:

```
• ls *[0-9]*
```

Brace Expansion

Description

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

Examples

• To create a whole directory structure in a single command:

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

• To create a N number of files use:

```
touch website{1..5}.html
touch file{A..Z}.txt
touch file{oo1..10}.py
touch file{{a..z}, {0..10}}.js
```

• Remove multiple files in a single directory:

```
• rm -r {dir1, dir2, dir3, file.txt, file.py}
```