

# Notes 7

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## Wildcards Notes

### Asterisk \*

Definition: Matches zero or more characters in a filename or directory name.

Examples:

```
ls *.txt
```

```
rm pro*
```

```
cp *jpg images/
```

### Question Mark ?

Matches exactly one character.

Examples:

```
ls file?.txt
```

```
mv log?.csv logs/
```

```
cat a?.md
```

### Brackets []

Matches one character from a set or range.

Examples:

```
ls file[1-3].txt
```

```
rm photo[AB].png
```

```
mv report[0-9].pdf reports/
```

### Negated Brackets [! ]

Matches one character not in the set.

Examples:

```
ls test[!0].log
```

```
rm data[!a-z].txt
```

```
cat file[!5].md
```

## Brace Expansion Notes

Brace expansion generates multiple items.

Examples echo file{1,2,3}.txt

touch notes{1..5}.md

Creating Directory Structures

Example 1 mkdir {images,css,js,fonts}

Example 2 mkdir -p project/{src/{css,js},dist,docs}

Directory tree created:

```
project/ └── src/ |   └── css/ |       └── js/ └── dist/ └── docs/
```

Example 3 touch report{A,B,C}.txt