

Week Report 6

Wildcards:

Represents letters and characters used to specify a file name for searches

* Wildcards

The main wildcard is a star or asterisk. A star alone matches anything and nothing and matches and number of characters.

Examples: List all the text files 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/
```

? Wildcards:

Matches one character and very useful when working with hidden files.

Examples: List all hidden files in the current directory:

```
ls ./.*?*
```

List all files that have a two character between letter b and k:

```
ls b??k*
```

List all the files that have a 3 letter file extension:

```
ls *.*??
```

[] Wildcards:

Match a single character in a range and use the exclamation mark to reverse the match.

Examples: List all files that have a vowel after letter f:

```
ls f[aeiou]*
```

List all files whose name begins with a letter from a-p or start with letter s or c:

```
ls [a-psc]*
```

List all files whose name begins with any 3 combinations of numbers and the current user's username:

```
ls [0-9][0-9]$USER
```

Brace Expansion:

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{001..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}
```

Practice

Practice 5

```

$ Terminal
Nov 2 12:32
masantana24978@cis106vm: ~/wildcardpractice

masantana24978@cis106vm:~$ curl -s https://cis.com/assets/wildcardpractice.sh | bash
masantana24978@cis106vm:~$ curl -s https://cis106.com/assets/wildcardpractice.sh | bash
--2022-11-02 12:23:44-- https://cis106.com/assets/logo100x100.png
Resolving cis106.com (cis106.com)... 185.199.108.153
Connecting to cis106.com (cis106.com)|185.199.108.153|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3520 (3.4K) [image/png]
Saving to: 'logo100x100.png'

logo100x100.png
100%[=====] 3.44K --.-KB/s in 0s

2022-11-02 12:23:44 (23.5 MB/s) - 'logo100x100.png' saved [3520/3520]

masantana24978@cis106vm:~$ ls wildcardpractice/*random*
wildcardpractice/_random.csv wildcardpractice/random_text.md wildcardpractice/randomtext.txt
masantana24978@cis106vm:~$ ls wildcardpractice/*.txt wildcardpractice/*.csv
wildcardpractice/78food.txt wildcardpractice/_random.csv wildcardpractice/randomtext.txt wildcardpractice/sample1234.csv wildcardpractice/sample123.csv
masantana24978@cis106vm:~$ cd wildcardpractice/
masantana24978@cis106vm:~/wildcardpractice$ ls random*.md
random_text.md
masantana24978@cis106vm:~/wildcardpractice$ ls *sample* *.md
random_text.md sample123.csv sample1.doc sample1.xls sample99.docx samplejsonfile.json sample.pdf samplesite.html
masantana24978@cis106vm:~/wildcardpractice$

```

Practice 6

```

$ Terminal
Nov 2 12:49
masantana24978@cis106vm: ~/wildcardpractice

masantana24978@cis106vm:~/wildcardpractice$ ls *???
2020-08-27-capture.raw 78food.txt baik.exe beatk.exe bk.exe book.exe fail.log _random.csv sample1234.csv sample1.xls sample.pdf
2021-04-10-screenshot.jpeg allfiles.lst baik.pdf beatk.pdf bk.pdf book.pdf file.log random_text.md sample123.csv sample99.docx Sample.pdf
2022-02-02-camera.jpg Allfiles.lst baik.xml beatk.xml bk.xml book.xml logo100x100.png randomtext.txt sample1.doc samplejsonfile.json samplesite.html
masantana24978@cis106vm:~/wildcardpractice$ ls .*??*
.bash_history .hidden1.doc .hidden1.py .hidden2.doc .hidden2.py .hiddenFile.txt
masantana24978@cis106vm:~/wildcardpractice$ ls b??*.???
baik.exe baik.pdf baik.xml beatk.exe beatk.pdf beatk.xml book.exe book.pdf book.xml
masantana24978@cis106vm:~/wildcardpractice$ ls sample?.*
sample1.doc sample1.xls
masantana24978@cis106vm:~/wildcardpractice$ ls .??*.??
.hidden1.py .hidden2.py
masantana24978@cis106vm:~/wildcardpractice$

```

Practice 7

```

$ Terminal
Nov 2 13:05
masantana24978@cis106vm: ~/wildcardpractice

masantana24978@cis106vm:~/wildcardpractice$ ls [a-z]*.???
allfiles.lst baik.pdf beatk.exe beatk.xml bk.pdf book.exe book.xml file.log randomtext.txt sample1.doc sample.pdf
baik.exe baik.xml beatk.pdf bk.exe bk.xml book.pdf fail.log logo100x100.png sample123.csv sample1.xls
masantana24978@cis106vm:~/wildcardpractice$ ls [A-Z]*[0-9]*
Sample1234.csv
masantana24978@cis106vm:~/wildcardpractice$ ls [0-9][0-9][0-9][0-9]*
2020-08-27-capture.raw 2021-04-10-screenshot.jpeg 2022-02-02-camera.jpg
masantana24978@cis106vm:~/wildcardpractice$ ls [AEIOUaeiou]*
allfiles.lst Allfiles.lst
masantana24978@cis106vm:~/wildcardpractice$ ls [[:punct:]]*
_random.csv
masantana24978@cis106vm:~/wildcardpractice$

```