

Week Report 6

Wildcards

* Wildcard

The * wildcard matches any characters 0 or more times.

- Examples:
 - List all text files in a directory
 - `ls *.txt`
 - List all files that start with dog
 - `ls dog.*`
 - List all files that have any letters before the word apple
 - `ls *apple.*`

? Wildcard

The ? wildcard matches one character.

- Examples:
 - List all the files with a 2 character file extension
 - `ls *.??`
 - List all the files that start with c and have 3 characters
 - `ls c??.*`
 - Copy all png files that has a name of 3 characters
 - `cp ~/Downloads/???.png ~/Pictures/`

[] Wildcard

The brackets wildcard matches a single character in the range. It uses an exclamation mark to reverse a match.

- Examples:
 - List all files that have any letters after c
 - `ls c[a-z]*`
 - List all doc files that do not have numbers in the name
 - `ls *[^0-9].doc`
 - List all png files whose name begins with h-o or start with f or n
 - `ls [h-ofn]*.png`

Brace Expansion

Brace expansion {} is used to generate strings with a command

- Examples:
 - Create 5 png files at once
 - `touch image{1..5}.png`

- Create multiple directories at once
 - `mkdir -p ~/Pictures/{dogs,cats}/{fluffy,big,small}/pics{1..3}`
- Remove multiple files at once
 - `rm -r {image1.png,image2.png,image3.png}`

Practices

Practice 5

```
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -1 *random*.*
_random.csv
random_text.md
randomtext.txt
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -1 *.csv *.txt
78food.txt
_random.csv
randomtext.txt
Sample1234.csv
sample123.csv
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -1 random*.md
random_text.md
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -1 *sample*.* *.md
random_text.md
sample123.csv
sample1.doc
sample1.xls
sample99.docx
samplejsonfile.json
sample.pdf
samplesite.html
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$
```

Practice 6

```
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -1X *.???
_random.csv
Sample1234.csv
sample123.csv
sample1.doc
baik.exe
beatk.exe
bk.exe
book.exe
2022-02-02-camera.jpg
fail.log
file.log
allfiles.lst
Allfiles.lst
baik.pdf
beatk.pdf
bk.pdf
book.pdf
sample.pdf
Sample.pdf
logo100x100.png
2020-08-27-capture.raw
78food.txt
randomtext.txt
sample1.xls
baik.xml
beatk.xml
bk.xml
book.xml
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls ./.*?
./bash_history ./hidden1.doc ./hidden1.py ./hidden2.doc ./hidden2.py ./hiddenFile.txt

sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -1X b???
baik.exe
beatk.exe
book.exe
baik.pdf
beatk.pdf
book.pdf
baik.xml
beatk.xml
book.xml
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -1X sample*.*
sample123.csv
sample1.doc
sample99.docx
samplesite.html
samplejsonfile.json
sample.pdf
sample1.xls
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ./.*?
bash: ./hidden1.py: Permission denied
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -1X ./.*?
./hidden1.py
./hidden2.py
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$
```

Practice 7

```
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -X [a-z]*
sample123.csv baik.exe bk.exe fail.log allfiles.lst beatk.pdf book.pdf logo100x100.png sample1.xls beatk.xml book.xml
sample1.doc beatk.exe book.exe file.log baik.pdf bk.pdf sample.pdf randomtext.txt baik.xml bk.xml
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -X [A-Z]*[0-9]*
Sample1234.csv
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -X [0-9][0-9][0-9][0-9]*
2021-04-10-screenshot.jpeg 2022-02-02-camera.jpg 2020-08-27-capture.raw
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -X [!AEIOUaeiou]*
_random.csv sample1.doc beatk.exe samplesite.html samplejsonfile.json random_text.md bk.pdf Sample.pdf 78food.txt baik.xml book.xml
Sample1234.csv sample99.docx bk.exe 2021-04-10-screenshot.jpeg fail.log baik.pdf book.pdf logo100x100.png randomtext.txt beatk.xml
sample123.csv baik.exe book.exe 2022-02-02-camera.jpg file.log beatk.pdf sample.pdf 2020-08-27-capture.raw sample1.xls bk.xml
```

```
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$ ls -X [[:punct:]]*  
_random.csv  
sadie-rose-tischler@sadie-rose-tischler-VirtualBox:~/wildcardpractice$
```