

Week Report 6

Wildcards

At least 3 examples per wildcard (*,?,[])

The ***** Wildcard Matches anything and nothing (any number of characters)

- `ls *.pdf` (display files with the .pdf extension)
- `ls file.*` (display files regardless of the file extension)
- `ls *.txt *.pdf` (display files with the file extension .txt and .pdf)

The **?** Wildcard Matches one character at a time

- `ls b??l*` (list all the files with two characters between b and k)
- `ls *.???` (list a file with 3 characters of file types and any name)
- `ls ./.*??*` (list all hidden files in the pwd)

☐ **Wildcard** Matches a single character in a given range

- `ls f[!aeiou]*` (files that don't have a vowel after the letter f)
- `ls [0-9]` (files that have at least one number)
- `ls [a-fp-z]*` (files that have the two sets of character: letters from a-f or p-z)

Practice

• Practice 5

```
djnunez43983@CIS106VM:~$ curl -s https://cis106.com/assets/wildcardpractice.sh | bash
--2022-10-29 21:39:23-- 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 0.001s

2022-10-29 21:39:23 (4.24 MB/s) - 'logo100x100.png' saved [3520/3520]

djnunez43983@CIS106VM:~$ ls
cis106  Downloads  lab4files  lab5ChallengeQuestion  lab5-video  Public  Videos
Desktop  gitcommands.txt  lab-5  lab5-docs  Music  snap  website
Documents  installPrograms.sh  lab5-audio  lab5-imgs  Pictures  Templates  wildcardpractice

djnunez43983@CIS106VM:~$ ls ~/wildcardpractice/*random*
/home/djnunez43983/wildcardpractice/_random.csv  /home/djnunez43983/wildcardpractice/randomtext.txt
/home/djnunez43983/wildcardpractice/random_text.md

djnunez43983@CIS106VM:~$ ls ~/wildcardpractice/*.txt *.csv
ls: cannot access '*.csv': No such file or directory
/home/djnunez43983/wildcardpractice/78food.txt  /home/djnunez43983/wildcardpractice/randomtext.txt
djnunez43983@CIS106VM:~$ ls ~/wildcardpractice/*.txt ~/wildcardpractice/*.csv
/home/djnunez43983/wildcardpractice/78food.txt  /home/djnunez43983/wildcardpractice/sample1234.csv
/home/djnunez43983/wildcardpractice/_random.csv  /home/djnunez43983/wildcardpractice/sample123.csv
/home/djnunez43983/wildcardpractice/randomtext.txt

djnunez43983@CIS106VM:~$ ls ~/wildcardpractice/random*.md
/home/djnunez43983/wildcardpractice/random_text.md

djnunez43983@CIS106VM:~$ ls ~/wildcardpractice/*sample* ~/wildcardpractice/*.md
/home/djnunez43983/wildcardpractice/random_text.md  /home/djnunez43983/wildcardpractice/sample99.docx
/home/djnunez43983/wildcardpractice/sample123.csv  /home/djnunez43983/wildcardpractice/samplejsonfile.json
/home/djnunez43983/wildcardpractice/sample1.doc  /home/djnunez43983/wildcardpractice/sample.pdf
/home/djnunez43983/wildcardpractice/sample1.xls  /home/djnunez43983/wildcardpractice/samplesite.html
djnunez43983@CIS106VM:~$
```

• Practice 6

```
djnunez43983@CIS106VM:~$ ls ~/wildcardpractice/*.???
/home/djnunez43983/wildcardpractice/2020-08-27-capture.raw  /home/djnunez43983/wildcardpractice/book.exe
/home/djnunez43983/wildcardpractice/2022-02-02-camera.jpg  /home/djnunez43983/wildcardpractice/book.pdf
/home/djnunez43983/wildcardpractice/78food.txt             /home/djnunez43983/wildcardpractice/book.xml
/home/djnunez43983/wildcardpractice/allfiles.lst           /home/djnunez43983/wildcardpractice/fail.log
/home/djnunez43983/wildcardpractice/allfiles.lst           /home/djnunez43983/wildcardpractice/file.log
/home/djnunez43983/wildcardpractice/baik.exe               /home/djnunez43983/wildcardpractice/logo100x100.png
/home/djnunez43983/wildcardpractice/baik.pdf               /home/djnunez43983/wildcardpractice/_random.csv
/home/djnunez43983/wildcardpractice/baik.xml               /home/djnunez43983/wildcardpractice/randomtext.txt
/home/djnunez43983/wildcardpractice/beatk.exe              /home/djnunez43983/wildcardpractice/sample123.csv
/home/djnunez43983/wildcardpractice/beatk.pdf              /home/djnunez43983/wildcardpractice/sample1.doc
/home/djnunez43983/wildcardpractice/beatk.xml              /home/djnunez43983/wildcardpractice/sample1.xls
/home/djnunez43983/wildcardpractice/bk.exe                 /home/djnunez43983/wildcardpractice/sample.pdf
/home/djnunez43983/wildcardpractice/bk.pdf                 /home/djnunez43983/wildcardpractice/sample.pdf
/home/djnunez43983/wildcardpractice/bk.xml                 /home/djnunez43983/wildcardpractice/sample.pdf

djnunez43983@CIS106VM:~$ ls -A ~/wildcardpractice/
2020-08-27-capture.raw    baik.pdf    bk.pdf    .hidden1.doc    random_text.md    samplejsonfile.json
2021-04-10-screenshot.jpeg baik.xml    bk.xml    .hidden1.py    randomtext.txt    sample.pdf
2022-02-02-camera.jpg    .bash_history book.exe    .hidden2.doc    Sample1234.csv    Sample.pdf
78food.txt               beatk.exe    book.pdf    .hidden2.py    sample123.csv    samplesite.html
allfiles.lst             beatk.pdf    book.xml    .hiddenFile.txt sample1.doc
Allfiles.lst             beatk.xml    fail.log    logo100x100.png sample1.xls
baik.exe                 bk.exe       file.log    _random.csv    sample99.docx

djnunez43983@CIS106VM:~$ cd ~/wildcardpractice/
djnunez43983@CIS106VM:~/wildcardpractice$ ls b???.???
ls: cannot access 'b???.???': No such file or directory
djnunez43983@CIS106VM:~/wildcardpractice$ ls b??*.???
baik.exe baik.pdf baik.xml beatk.exe beatk.pdf beatk.xml book.exe book.pdf book.xml
djnunez43983@CIS106VM:~/wildcardpractice$ ls sample*.*
ls: cannot access 'sample*.*': No such file or directory
djnunez43983@CIS106VM:~/wildcardpractice$ ls sample?.*
sample1.doc sample1.xls
djnunez43983@CIS106VM:~/wildcardpractice$ ls .??*.*
.hidden1.py .hidden2.py
djnunez43983@CIS106VM:~/wildcardpractice$
```

• Practice 7

```
djnunez43983@CIS106VM:~/wildcardpractice$ ls [a-z]*.???
allfiles.lst baik.xml beatk.xml bk.xml book.xml logo100x100.png sample1.doc
baik.exe beatk.exe bk.exe book.exe fail.log randomtext.txt sample1.xls
baik.pdf beatk.pdf bk.pdf book.pdf file.log sample123.csv sample.pdf

djnunez43983@CIS106VM:~/wildcardpractice$ ls [A-Z0-9]*.*
2020-08-27-capture.raw 2022-02-02-camera.jpg Allfiles.lst Sample.pdf
2021-04-10-screenshot.jpeg 78food.txt Sample1234.csv
djnunez43983@CIS106VM:~/wildcardpractice$ ls [A-Z]*[0-9]*.*
Sample1234.csv
djnunez43983@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
djnunez43983@CIS106VM:~/wildcardpractice$ ls [!aeioua-z]*.*
2020-08-27-capture.raw 2022-02-02-camera.jpg Allfiles.lst Sample1234.csv
2021-04-10-screenshot.jpeg 78food.txt _random.csv Sample.pdf
djnunez43983@CIS106VM:~/wildcardpractice$ ls [!AEIOUaeiou]*.*
2020-08-27-capture.raw baik.xml bk.xml logo100x100.png sample1.doc samplesite.html
2021-04-10-screenshot.jpeg beatk.exe book.exe _random.csv sample1.xls
2022-02-02-camera.jpg beatk.pdf book.pdf random_text.md sample99.docx
78food.txt beatk.xml book.xml randomtext.txt samplejsonfile.json
baik.exe bk.exe fail.log Sample1234.csv sample.pdf
baik.pdf bk.pdf file.log sample123.csv Sample.pdf
djnunez43983@CIS106VM:~/wildcardpractice$ ls [[:punct:]]*.*
_random.csv
djnunez43983@CIS106VM:~/wildcardpractice$
```

Brace Expansion

What is Brace Expansion and how to use it? Allows you to generate arbitrary string to use with commands, it let you create a whole directory structure in a single line

Examples

- `mkdir -p music/{jazz,rock}/{mp3files,videos,oggfiles}/new{1..3}`
- `touch file{A..Z}.txt` (to create a N number of files use)
- `rm -r {dir1,dir2,dir3,file.txt}` (to remove multiple files in a single directory)