

Week Report 6

Wildcards

* Wildcard

The * wildcard matches from 0 to any 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/`

? Wildcard

The ? wildcard matches a single character.

- Examples:
 - List all the files that have 3 characters and are followed by the word file in the name
 - `ls ???file*`
 - List all files that have a file extension name of 3 characters
 - `ls *.???`
 - List all txt files that start with "memo" and end with one character.
 - `ls memo?.txt`

☐ Wildcard

☐ wildcard matches a single character in a range.

- Examples:
 - List all files that have any 3 alphabetical character file extension
 - `ls *.[a-z][a-z][a-z]`
 - List all files whose name does not have a number in their file name
 - `ls *[^0-9].*`
 - List all files whose name has at least one number:
 - `ls *[0-9]*.*`

Brace Expansion

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

- Examples:
 - Create N number of files at once
 - `touch memo{1..5}.txt`

- Create a directory structure in a single command
 - `mkdir -p music/{jazz,rock}/{mp3files,videos,oggfiles}/new{1..3}`
- Remove multiple files in a single directory
 - `rm -r {dir1,dir2,dir3,file.txt,file.py}`

Practice

Practice 5

```

ariverarodriguez@cis106: ~
ariverarodriguez@cis106:~$ curl -s https://cis106.com/assets/wildcardpractice.sh | bash
--2023-11-29 22:34:23-- 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 0s

2023-11-29 22:34:23 (34.8 MB/s) - 'logo100x100.png' saved [3520/3520]

ariverarodriguez@cis106:~$ ls wildcardpractice/*random*
wildcardpractice/_random.csv  wildcardpractice/random_text.md  wildcardpractice/randomtext.txt
ariverarodriguez@cis106:~$ ls wildcardpractice/*.csv wildcardpractice/.txt
ls: cannot access 'wildcardpractice/.txt': No such file or directory
wildcardpractice/_random.csv  wildcardpractice/sample1234.csv  wildcardpractice/sample123.csv
ariverarodriguez@cis106:~$ ls wildcardpractice/*.csv wildcardpractice/*.txt
wildcardpractice/78food.txt  wildcardpractice/randomtext.txt  wildcardpractice/sample123.csv
wildcardpractice/_random.csv  wildcardpractice/sample1234.csv
ariverarodriguez@cis106:~$ ls wildcardpractice/random*.md
wildcardpractice/random_text.md
ariverarodriguez@cis106:~$ ls wildcardpractice/*sample* wildcardpractice/*.md
wildcardpractice/random_text.md  wildcardpractice/sample1.xls  wildcardpractice/sample.pdf
wildcardpractice/sample123.csv  wildcardpractice/sample99.docx  wildcardpractice/samplesite.html
wildcardpractice/sample1.doc  wildcardpractice/samplejsonfile.json
ariverarodriguez@cis106:~$

```

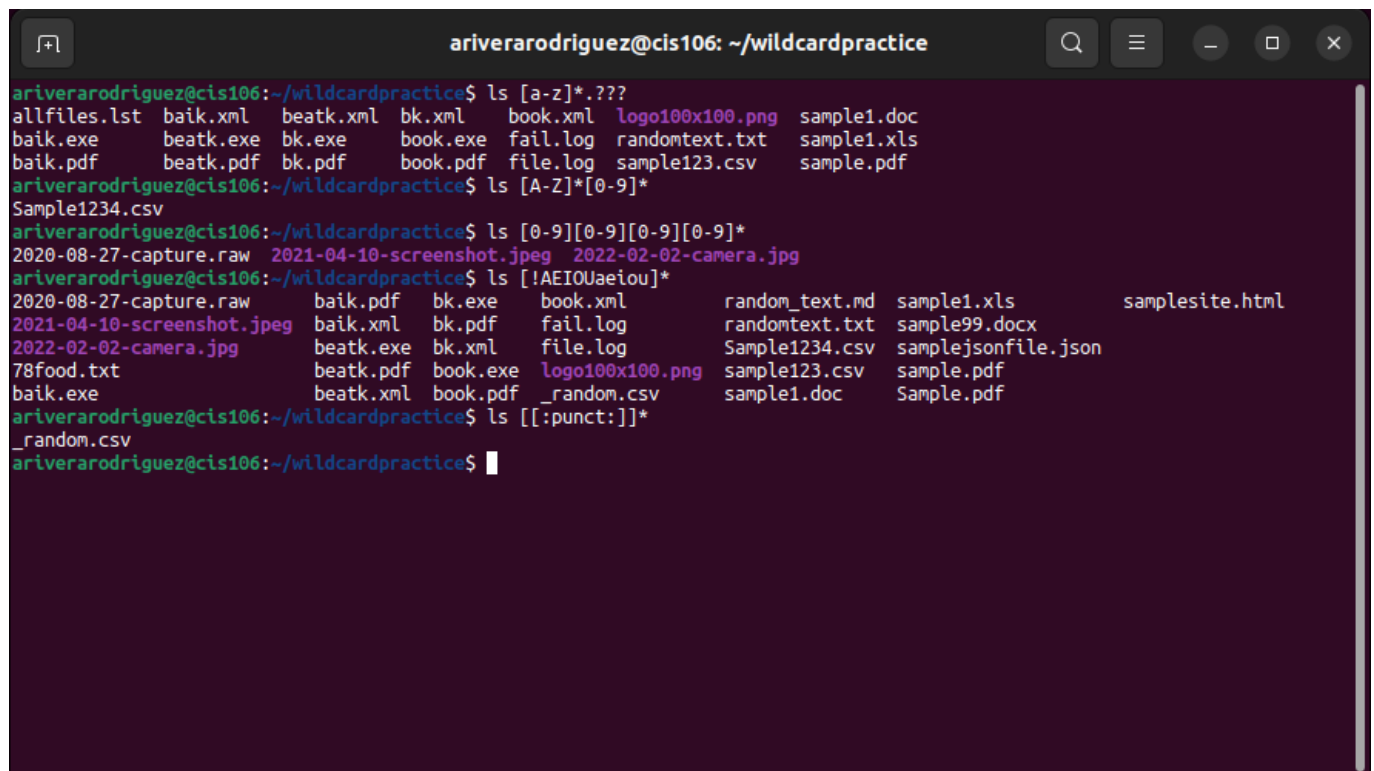
Practice 6

```

ariverarodriguez@cis106: ~/wildcardpractice
ariverarodriguez@cis106:~$ cd wildcardpractice/
ariverarodriguez@cis106:~/wildcardpractice$ ls *.*??
2020-08-27-capture.raw  Allfiles.lst  beatk.exe  bk.pdf  book.xml  _random.csv  sample1.doc
2022-02-02-camera.jpg  baik.exe  beatk.pdf  bk.xml  fail.log  randomtext.txt  sample1.xls
78food.txt  baik.pdf  beatk.xml  book.exe  file.log  Sample1234.csv  sample.pdf
allfiles.lst  baik.xml  bk.exe  book.pdf  logo100x100.png  sample123.csv  Sample.pdf
ariverarodriguez@cis106:~/wildcardpractice$ ls .*??*
.bash_history  .hidden1.doc  .hidden1.py  .hidden2.doc  .hidden2.py  .hiddenFile.txt
ariverarodriguez@cis106:~/wildcardpractice$ ls b??*.*??
baik.exe  baik.pdf  baik.xml  beatk.exe  beatk.pdf  beatk.xml  book.exe  book.pdf  book.xml
ariverarodriguez@cis106:~/wildcardpractice$ ls sample?.*
sample1.doc  sample1.xls
ariverarodriguez@cis106:~/wildcardpractice$ ls .*??*.*?
.hidden1.py  .hidden2.py
ariverarodriguez@cis106:~/wildcardpractice$

```

Practice 7



```
ariverarodriguez@cis106: ~/wildcardpractice
ariverarodriguez@cis106:~/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
ariverarodriguez@cis106:~/wildcardpractice$ ls [A-Z]*[0-9]*
Sample1234.csv
ariverarodriguez@cis106:~/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
ariverarodriguez@cis106:~/wildcardpractice$ ls [!AEIOUaeiou]*
2020-08-27-capture.raw  baik.pdf  bk.exe  book.xml  random_text.md  sample1.xls  samplesite.html
2021-04-10-screenshot.jpeg  baik.xml  bk.pdf  fail.log  randomtext.txt  sample99.docx
2022-02-02-camera.jpg      beatk.exe  bk.xml  file.log  Sample1234.csv  samplejsonfile.json
78food.txt               beatk.pdf  book.exe  logo100x100.png  sample123.csv  sample.pdf
baik.exe                 beatk.xml  book.pdf  _random.csv  sample1.doc    Sample.pdf
ariverarodriguez@cis106:~/wildcardpractice$ ls [[:punct:]]*
_random.csv
ariverarodriguez@cis106:~/wildcardpractice$
```