

Week report 6

Wildcards.

* Wildcard

the * wildcard matches from 0 to any number of characters.

- Examples:
 - List all the text file 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 metacharacter matches precisely one character.

- Examples:
 - List all hidden files in the current directory
 - 'ls ./.*?*'
 - List all the 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 *.???'

[] Wildcard

The [] wildcard match a single character in a range.

- Examples
 - Match all files that have a vowel after letter f.
 - 'ls f[aeiou]*'
 - Match all files that do not have a vowel after letter f.
 - 'ls f[!aeiou]*'
 - Match all files that have a range of letters after f.
 - 'ls f[a-z]*'

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
 - 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'
- Remove multiple files in a single directory.
 - 'rm -r {dir1,dir2,dir3,file.txt,file.py}'

Practice

```

1: ajmartinez48305@cis106: ~/wildcardpractice
ajmartinez48305@cis106:~$ curl -s https://cis106.com/assets/wildcardpractice.sh | bash
--2023-05-02 13:01:03-- 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
2023-05-02 13:01:03 (55.9 MB/s) - 'logo100x100.png' saved [3520/3520]

ajmartinez48305@cis106:~/wildcardpractice$ ls *random*
_random.csv random_text.md randomtext.txt
ajmartinez48305@cis106:~/wildcardpractice$ ls *.csv *.txt
78food.txt _random.csv randomtext.txt Sample1234.csv Sample123.csv
ajmartinez48305@cis106:~/wildcardpractice$ ls random*.md
random_text.md
ajmartinez48305@cis106:~/wildcardpractice$ ls *sample*.md
ls: cannot access '*sample*.md': No such file or directory
ajmartinez48305@cis106:~/wildcardpractice$ ls *sample* *.md
random_text.md sample1.doc sample99.docx sample.pdf
sample123.csv sample1.xls samplejsonfile.json samplesite.html
ajmartinez48305@cis106:~/wildcardpractice$ _

1: ajmartinez48305@cis106: ~/wildcardpractice
ajmartinez48305@cis106:~/wildcardpractice$ ls *.*??
2020-08-27-capture.raw baik.pdf bk.pdf file.log sample1.doc
2022-02-02-camera.jpg baik.xml bk.xml logo100x100.png sample1.xls
78food.txt beatk.exe book.exe _random.csv sample.pdf
allfiles.lst beatk.pdf book.pdf randomtext.txt Sample.pdf
Allfiles.lst beatk.xml book.xml Sample1234.csv
baik.exe bk.exe fail.log sample123.csv
ajmartinez48305@cis106:~/wildcardpractice$ ls.??*
ls.??*: command not found
ajmartinez48305@cis106:~/wildcardpractice$ ls.??*
.bash_history .hidden1.py .hidden2.py
.hidden1.doc .hidden2.doc .hiddenFile.txt
ajmartinez48305@cis106:~/wildcardpractice$ ls b??*.??
baik.exe baik.xml beatk.pdf book.exe book.xml
baik.pdf beatk.exe beatk.xml book.pdf
ajmartinez48305@cis106:~/wildcardpractice$ ls sample?.*
sample1.doc sample1.xls
ajmartinez48305@cis106:~/wildcardpractice$ ls.??*.??
.hidden1.py .hidden2.py
ajmartinez48305@cis106:~/wildcardpractice$ _

1: ajmartinez48305@cis106: ~/wildcardpractice
ajmartinez48305@cis106:~/wildcardpractice$ ls [a-z]*??
allfiles.lst beatk.pdf book.exe logo100x100.png sample1.xls
baik.exe beatk.xml book.pdf random_text.md sample99.docx
baik.pdf bk.exe book.xml randomtext.txt samplejsonfile.json
baik.xml bk.pdf fail.log sample123.csv sample.pdf
beatk.exe bk.xml file.log sample1.doc samplesite.html
ajmartinez48305@cis106:~/wildcardpractice$ ls [A-Z]*[0-9]*
Sample1234.csv
ajmartinez48305@cis106:~/wildcardpractice$ ls [1-2][0-9][0-9][0-9]*
2020-08-27-capture.raw 2021-04-10-screenshot.jpeg 2022-02-02-camera.jpg
ajmartinez48305@cis106:~/wildcardpractice$ ls [!aeiouAEIOUa-zA-Z]*
2020-08-27-capture.raw 2022-02-02-camera.jpg _random.csv
2021-04-10-screenshot.jpeg 78food.txt
ajmartinez48305@cis106:~/wildcardpractice$ ls [[punct:]]*
_random.csv
ajmartinez48305@cis106:~/wildcardpractice$ _

```