

Week Report 6

Wildcard

* Wildcard

The `*` wildcard will matches any character or number after the asterisk. Mostly use to find files and directories with a condition. **Examples:**

- `ls -a *.txt` - To list all the text files in a directory
- `ls -a f*.txt` - To list all the text files starting with letter *f*
- `mv ~/Documents/*.mp3 ~/Downloads/Music` - To move all the mp3 files in the documents folder to the Music folder inside Downloads

? Wildcard

The `?` wildcard will matches a single character or number that can go with the condition asked between numbers and letters. **Examples:**

- `ls dir?.txt` - To list all the text files staring with *dir* and match anything after that.
- `ls music.???` - To list all the files with the name *music* with any extension that includes 3 characters or digits.
- `rm sample.???` - To remove all the files with the name *sample* with any extension that includes 3 characters or digits.

[] Wildcard

The `[]` wildcard will match a set of characters or number of the files we are looking for. **Examples:**

- `ls file[0-9]*` - To list all the files with the name *file* and any number after.
- `ls f[a-z]n*.txt` - To list all the text files starting with *f* following by any lowercase letter and letter *n*.
- `cp log[0-9][1].log` - To copy all the log files containing a number between 0-9 first and 1 after.

Brace Expansion

The `{ }` brace expansion is use to generate multiple directories and files at the same time as well as creating multiple files with a set of conditions and to remove files with specific conditions. **Examples:**

- `mkdir ~/music/{mp3,mp4}/{track,samples}` - This command will create a directory named *music* inside will create *mp3* and *mp4* and inside this two will also create *track* and *samples*
- `touch website{1..10}.html` - This command will create 10 html files named *website* with each designated number after website.
- `rm website{1..10}.html` - This command will remove all the html files named *website* that have a number from 1 to 10.

Practice 1

```
1/1  +  [ ] [ ]  Tilix: cgcollado@cis106vm: ~
1: cgcollado@cis106vm: ~
cgcollado@cis106vm:~$ curl -s https://cis106.com/assets/wildcardpractice.sh | bash
--2023-04-11 23:10:37--  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

2023-04-11 23:10:37 (74.2 MB/s) - 'logo100x100.png' saved [3520/3520]

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

Practice 2

```
1/1  +  [ ] [ ]  Tilix: cgcollado@cis106vm: ~/wildcardpractice
1: cgcollado@cis106vm: ~/wildcardpractice
cgcollado@cis106vm:~/wildcardpractice$ ls *.???
2020-08-27-capture.raw  Allfiles.lst  beatk.exe  bk.pdf  logo100x100.png  sample123.csv
2022-02-02-camera.jpg  baik.exe     beatk.pdf  bk.xml  _random.csv      sample1.doc
78food.txt             baik.pdf     beatk.xml  fail.log randomtext.txt   sample1.xls
allfiles.lst           baik.xml     bk.exe     file.log Sample1234.csv

cgcollado@cis106vm:~/wildcardpractice$ ls .??*
.bash_history .hidden1.doc .hidden1.py .hidden2.doc .hidden2.py .hiddenFile.txt
cgcollado@cis106vm:~/wildcardpractice$ ls b??*.???
baik.exe baik.pdf baik.xml beatk.exe beatk.pdf beatk.xml
cgcollado@cis106vm:~/wildcardpractice$ ls sample?.*
sample1.doc sample1.xls
cgcollado@cis106vm:~/wildcardpractice$ ls .??*.??
.hidden1.py .hidden2.py
cgcollado@cis106vm:~/wildcardpractice$
```

Practice 3

```
1/1 + [T] [R] Tilix: cgcollado@cis106vm: ~/wildcardpractice
1: cgcollado@cis106vm: ~/wildcardpractice
cgcollado@cis106vm:~/wildcardpractice$ ls [a-z]*.???
allfiles.lst baik.xml beatk.xml bk.xml logo100x100.png sample1.doc
baik.exe beatk.exe bk.exe fail.log randomtext.txt sample1.xls
baik.pdf beatk.pdf bk.pdf file.log sample123.csv
cgcollado@cis106vm:~/wildcardpractice$ ls [A-Z]*[0-9]*
Sample1234.csv
cgcollado@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
cgcollado@cis106vm:~/wildcardpractice$ ls [!AEIOUaeiou]*
2020-08-27-capture.raw baik.xml bk.xml randomtext.txt samplejsonfile.json
2021-04-10-screenshot.jpeg beatk.exe fail.log Sample1234.csv samplesite.html
2022-02-02-camera.jpg beatk.pdf file.log sample123.csv
78food.txt beatk.xml logo100x100.png sample1.doc
baik.exe bk.exe _random.csv sample1.xls
baik.pdf bk.pdf random_text.md sample99.docx
cgcollado@cis106vm:~/wildcardpractice$ ls [[:punct:]]*
_random.csv
cgcollado@cis106vm:~/wildcardpractice$
```

Practice 4

```
1/1 + [T] [R] Tilix: cgcollado@cis106vm: ~
1: cgcollado@cis106vm: ~
cgcollado@cis106vm:~$ mkdir -p music/{jazz,rock}/{mp3files,videos,oggfiles}/new
cgcollado@cis106vm:~$ tree music/
music/
├── jazz
│   ├── mp3files
│   │   └── new
│   ├── oggfiles
│   │   └── new
│   └── videos
│       └── new
└── rock
    ├── mp3files
    │   └── new
    ├── oggfiles
    │   └── new
    └── videos
        └── new

14 directories, 0 files
cgcollado@cis106vm:~$
```