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.
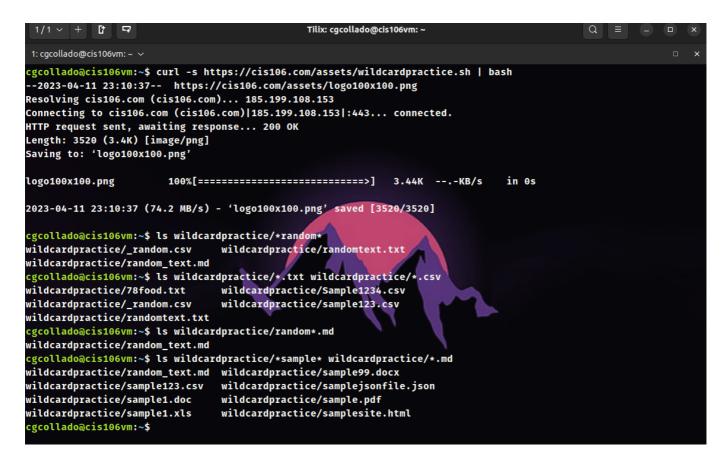
Brace Expansion

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.
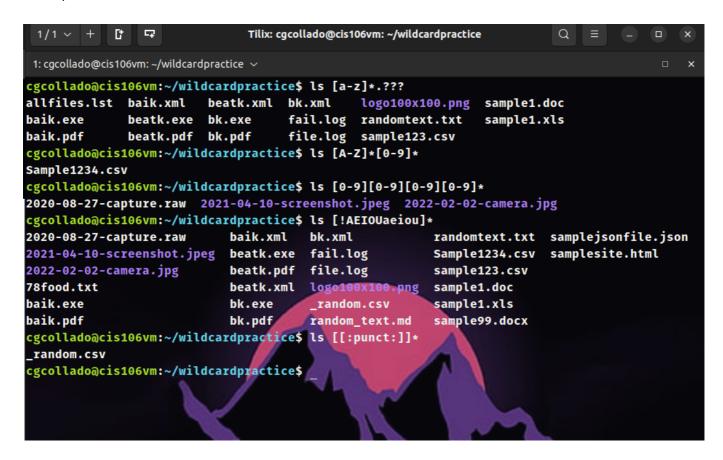
Practice 1

Practice 2

Practice 3

```
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


```
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:~$
```