The * Wildcard Will match anything or nothing so it should be used in addition to characters you know you're looking for otherwise your search will return everything

ex 1: ls *.md Will list everything the ends with the .md file extension

ex 2: ls Jerry* If you're using a naming convention that starts with a person's name it will list all the files attributer to "Jerry"

ex 3: ls File.* Will list everything named "File" under any file extension

The ? Wildcard The ? wildcard matches one character. Can be used to find hidden files

ex 1: ls ./.??* Lists all hidden files in the current directory

ex 2: ls ../.??* Lists all the hidden files in the parent directory

ex 3: ls *.?? Lists all files with a two character file extension

ex 4: *19??*.txt Will search for all files dated 1900-1999

The [] Wildcard Brackets allow you to specify a set or range in which a single character may exist can be modified with ! to specify a set or range of characters to exclude from the search. Letters are case sensitive. Can be used with character classes

ex 1: ls [0-9]* will list any file that starts with a number

ex 2: ls [a-zA-Z]* will list any file starting with any letter, upper or lower case

ex 3: ls [!0-9][!0-9][!0-9]* will list files whose first three characters are not numbers

ex 4: ls *[[:space:]]* will list any file with a whitespace character in the middle

Brace Expansion Brace expansion is a bash feature that allows you to generate arbitrary strings to use with commands

ex 1: touch weeklyreport{1..8}.md Will generate 8 weekly report files numbered 1 through 8

ex 2: mkdir -p roms/{snes,genesis,tg16}/{rpg,shmup,platformer} Will create a file structure. *note* -p option allows mkdir to create the necessary parent folders

ex 3: rm -r {poem.txt,dog.png,homework.py} Remove multiple files in a directory

```
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 0.004s

2023-11-18 19:52:49 (944 KB/s) - 'logo100x100.png' saved [3520/3520]

jcpachtinger@cis106:~$ cd wildcardpractice/
jcpachtinger@cis106:~/wildcardpractice$ ls *random*
_random.csv  random_text.md  randomtext.txt
jcpachtinger@cis106:~/wildcardpractice$ ls *.csv
_random.csv  Sample1234.csv  sample123.csv
jcpachtinger@cis106:~/wildcardpractice$ ls *.txt
78food.txt  randomtext.txt
jcpachtinger@cis106:~/wildcardpractice$ ls random*.md
random_text.md
jcpachtinger@cis106:~/wildcardpractice$ ls *sample*
sample123.csv  sample1.xls    samplejsonfile.json  samplesite.html
sample1.doc    sample99.docx  sample.pdf
jcpachtinger@cis106:~/wildcardpractice$ ls *.md
jcpachtinger@cis106:~/wildcardpractice$ _
```

```
jcpachtinger@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
jcpachtinger@cis106:~/wildcardpractice$ ls ./.??*
./.bash_history  ./.hidden1.py   ./.hidden2.py
./.hidden1.doc   ./.hidden2.doc  ./.hiddenFile.txt
jcpachtinger@cis106:~/wildcardpractice$ ls b??.???
ls: cannot access 'b??.???': No such file or directory
jcpachtinger@cis106:~/wildcardpractice$ ls b??*.???
baik.exe  baik.xml   beatk.pdf  book.exe  book.xml
baik.pdf  beatk.exe  beatk.xml  book.pdf
jcpachtinger@cis106:~/wildcardpractice$ ls sample?.*
sample1.doc  sample1.xls
jcpachtinger@cis106:~/wildcardpractice$ ls ./.??*.??
jcpachtinger@cis106:~/wildcardpractice$ _
```

```
jcpachtinger@cis106:~/wildcardpractice$ ls [a-z]*.???
allfiles.lst    beatk.exe   bk.pdf     book.xml        randomtext.txt    sample.pdf
baik.exe        beatk.pdf   bk.xml     fail.log        sample123.csv
baik.pdf        beatk.xml   book.exe   file.log        sample1.doc
baik.xml        bk.exe      book.pdf   logo100x100.png sample1.xls
jcpachtinger@cis106:~/wildcardpractice$ [A-Z]*[0-9]*.*
Sample1234.csv: command not found
jcpachtinger@cis106:~/wildcardpractice$ ls [A-Z]*[0-9]*.*
Sample1234.csv
jcpachtinger@cis106:~/wildcardpractice$ [0-9][0-9][0-9][0-9]*
2020-08-27-capture.raw: command not found
jcpachtinger@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
jcpachtinger@cis106:~/wildcardpractice$ ls [!aeiouAEIOU]*
2020-08-27-capture.raw        beatk.pdf  fail.log         sample1.doc
2021-04-10-screenshot.jpeg    beatk.xml  file.log         sample1.xls
2022-02-02-camera.jpg         bk.exe     logo100x100.png  sample99.docx
78food.txt                    bk.pdf     _random.csv      samplejsonfile.json
baik.exe                      bk.xml     random_text.md   sample.pdf
baik.pdf                      book.exe   randomtext.txt   Sample.pdf
baik.xml                      book.pdf   Sample1234.csv   samplesite.html
beatk.exe                     book.xml   sample123.csv
jcpachtinger@cis106:~/wildcardpractice$ ls [[:punct:]]*
_random.csv
jcpachtinger@cis106:~/wildcardpractice$ _
```