

## The \* wildcard

This wildcard matches anything for any number of characters. Examples: `ls *cookie.txt` list all files that end with `cookie.txt` `ls .py` shows all files that end in `py` `ls apple` shows all files that begin with `apple`

### Practice 5

```
1:ssgunthrope@cis106vm: ~/wildcardpractice ▾
ssgunthrope@cis106vm:~$ cd wildcardpractice/
ssgunthrope@cis106vm:~/wildcardpractice$ ls *random*
_random.csv random_text.md randomtext.txt
ssgunthrope@cis106vm:~/wildcardpractice$ ls *.csv *.txt
78food.txt _random.csv randomtext.txt Sample1234.csv sample123.csv
ssgunthrope@cis106vm:~/wildcardpractice$ random*.md
random_text.md: command not found
ssgunthrope@cis106vm:~/wildcardpractice$ ls random*.md
random_text.md
ssgunthrope@cis106vm:~/wildcardpractice$ ls *sample* *.md
random_text.md sample1.doc sample99.docx sample.pdf
sample123.csv sample1.xls samplejsonfile.json samplesite.html
ssgunthrope@cis106vm:~/wildcardpractice$ _
```

## THE ? wildcard

The `?` wildcard matches one character. Examples: `ls .???`  shows files with extensions that are 3 characters `ls ???`  shows files that are 3 characters or more

### Practice 6

?prac.1 ?prac.2

## the [] wildcard

`[]` wild card is used to to match a single character in range and can be reversed using the `!` character  
Examples: `ls [0-9]*` shows all files that begin with a number `ls [A-Z]` shows all files the end with a capital letter  
`ls [a-z].??` shows all files that start with a lowercase letter and has two characters as their file extension.

### Practice 7

```

ssgunthrope@cis106vm:~/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
ssgunthrope@cis106vm:~/wildcardpractice$ ls [A-Z]*[0-9]*
Sample1234.csv
ssgunthrope@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
ssgunthrope@cis106vm:~/wildcardpractice$ ls [!AEIOUaeiou]*
2020-08-27-capture.raw      beatk.exe  book.pdf      randomtext.txt      sample.pdf
2021-04-10-screenshot.jpeg  beatk.pdf  book.xml      Sample1234.csv      Sample.pdf
2022-02-02-camera.jpg      beatk.xml  fail.log      sample123.csv       samplesite.htm
78food.txt                  bk.exe     file.log      sample1.doc
baik.exe                     bk.pdf    logo100x100.png  sample1.xls
baik.pdf                     bk.xml    _random.csv    sample99.docx
baik.xml                     book.exe  random_text.md  samplejsonfile.json
ssgunthrope@cis106vm:~/wildcardpractice$ ls [[:punct:]]*
_random.csv
ssgunthrope@cis106vm:~/wildcardpractice$ _

```

## Brace Expansion

A feature of bash that allows you to generate arbitrary strings. Examples: touch chips{1-4}.txt creates 4 files that begins with chip and is a text file echo{7..2} counts down from 7 to 2 and displays it rm [file1,file2,file3] deletes files 1-3