File Globing/Wildcards

Question 1

```
aybs248@cis106:~$ curl https://cis106.com/assets/lab6.sh | bash
             % Received % Xferd Average Speed
                                                                           Current
                                  Dload Upload
                                                   Total
                                                            Spent
                                                                     Left
                                                                           Speed
        0
             0
                   0
                         0
                                              0 --:--100
                                                           425 100
                                                                                         1375
                               1379
naybs248@cis106:~$ ls /etc/*.conf
                                                   /etc/pam.conf
/etc/adduser.conf
                            /etc/host.conf
/etc/apg.conf
                            /etc/inxi.conf
                                                   /etc/pnm2ppa.conf
                            /etc/kernel-img.conf
/etc/appstream.conf
                                                   /etc/popularity-contest.conf
/etc/brltty.conf
                            /etc/kerneloops.conf
                                                   /etc/resolv.conf
                            /etc/ld.so.conf
/etc/ca-certificates.conf
                                                   /etc/rsyslog.conf
                            /etc/libao.conf
/etc/debconf.conf
                                                   /etc/rygel.conf
/etc/deluser.conf
                            /etc/libaudit.conf
                                                   /etc/sensors3.conf
/etc/e2scrub.conf
                            /etc/logrotate.conf
                                                   /etc/sysctl.conf
                            /etc/ltrace.conf
/etc/fprintd.conf
                                                   /etc/ucf.conf
                            /etc/mke2fs.conf
/etc/fuse.conf
                                                   /etc/usb modeswitch.conf
/etc/gai.conf
                            /etc/mtools.conf
                                                   /etc/xattr.conf
                            /etc/nsswitch.conf
/etc/hdparm.conf
naybs248@cis106:~$ ls -lqGhS --time-style=+%D /etc/h*.conf /etc/p*.conf
 rw-r--r-- 1 7.5K 02/23/22 /etc/pnm2ppa.conf
 rw-r--r-- 1 5.0K 08/21/19 /etc/hdparm.conf
 rw-r--r-- 1 552 12/17/19 /etc/pam.conf
rw-rw-r-- 1 350 03/01/22 /etc/popularity-contest.conf
·rw-r--r-- 1
               92 12/05/19 /etc/host.conf
maybs248@cis106:~$ ls /usr/share/themes/*/*.theme -R
/usr/share/themes/Adwaita-dark/index.theme /usr/share/themes/Yaru-dark/index.theme
/usr/share/themes/Adwaita/index.theme
                                              /usr/share/themes/Yaru/index.theme
/usr/share/themes/HighContrast/index.theme
                                              /usr/share/themes/Yaru-light/index.theme
 aybs248@cis106:~$ ls lab6/*.log
lab6/88 Application-log.log
                              lab6/fontconfig.log
                                                     lab6/unattended-upgrades-dpkg.log
lab6/alternatives.log
                              lab6/qpu-manager.log
                                                     lab6/unattended-upgrades.log
lab6/apache01-error.log
                              lab6/history.log
                                                     lab6/unattended-upgrades-shutdown.log
lab6/apache22.log
                              lab6/http404.log
                                                     lab6/vboxadd-install.log
lab6/auth.log
                              lab6/kern.log
                                                     lab6/vboxadd-setup.log
lab6/bootstrap.log
                              lab6/make.log
                              lab6/term.log
lab6/dpkg.log
maybs248@cis106:~$ mkdir lab6/log-files
maybs248@cis106:~$ mv lab6/*.log lab6/log-files/
aybs248@cis106:~$
```

Question 2

```
naybs248@cis106:~$ ls -A lab6/.??*
lab6/.appveyor.yml
                      lab6/.gitconfig
                                             lab6/.nycrc
                      lab6/.gitignore
lab6/.auto-changelog
                                             lab6/.obsolete
lab6/.bash history
                      lab6/.gitkeep
                                             lab6/.padding
                      lab6/.gitmodules
lab6/.bash logout
                                             lab6/.parentlock
                      lab6/.hidden
lab6/.bashrc
                                             lab6/.prettierignore
lab6/.changed
                      lab6/.htaccess
                                             lab6/.prettierrc.yaml
                      lab6/.istanbul.yml
lab6/.cis106.png
                                             lab6/.profile
lab6/.coveralls.yml
                      lab6/.jscs.json
                                             lab6/.sudo_as_admin_successful
lab6/.dir-locals.el
                      lab6/.jscsrc
                                             lab6/.tern-project
lab6/.editorconfig
                      lab6/.jshintignore
                                             lab6/.tm properties
lab6/.envrc
                      lab6/.jshintrc
                                             lab6/.tonic example.js
                      lab6/.keep
lab6/.eslintignore
                                             lab6/.travis.yml
                                             lab6/.vboxclient-clipboard.pid
lab6/.eslintrc
                      lab6/.last revision
lab6/.eslintrc.js
                      lab6/.metadata-v2
                                             lab6/.vboxclient-display-svga-x11.pid
                                            lab6/.vboxclient-draganddrop.pid
lab6/.eslintrc.json
                      lab6/.meta.isrunning
lab6/.eslintrc.yml
                      lab6/.min-wd
                                             lab6/.vboxclient-seamless.pid
                      lab6/.npmignore
                                             lab6/.vsixmanifest
lab6/.gitattributes
maybs248@cis106:~$ ls -A lab6/*.??
lab6/file_00.sh lab6/file_02.sh lab6/file_04.sh
lab6/file_01.sh lab6/file_03.sh lab6/file_05.sh
naybs248@cis106:~$ ls -A lab6/l?*st*
lab6/last.txt lab6/list.txt lab6/lost.txt
maybs248@cis106:~$ ls -A lab6/* ??*
lab6/file 00.sh lab6/file 02.sh lab6/file 04.sh
lab6/file 01.sh lab6/file 03.sh lab6/file 05.sh
maybs248@cis106:~$
```

Question 3

```
aybs248@cis106:~$ ls lab6/[A-Z]*
lab6/Document.doc lab6/Expenses.xls
maybs248@cis106:~$ ls lab6/[A-Z0-9]*
lab6/25Games.lst lab6/Document.doc
                                    lab6/Expenses.xls
naybs248@cis106:~$ ls lab6/*[0-9]*
lab6/25Games.lst
                  lab6/file 00.sh
                                   lab6/file 02.sh lab6/file 04.sh
                                                                     lab6/trip22-info.doc
lab6/apache03.err lab6/file 01.sh
                                   lab6/file 03.sh lab6/file 05.sh
maybs248@cis106:~$ ls lab6/[a-z][0-9]*
ls: cannot access 'lab6/[a-z][0-9]*': No such file or directory
maybs248@cis106:~$ ls lab6/[a-z]*[0-9]*
lab6/apache03.err lab6/file_01.sh lab6/file_03.sh lab6/file_05.sh
                  lab6/file 02.sh lab6/file 04.sh lab6/trip22-info.doc
lab6/file 00.sh
maybs248@cis106:~$
```

Question 4

```
aybs248@cis106:~$ cd lab6/
aybs248@cis106:~/lab6$ mkdir -p wallpapers/cars/{1080p,2k,4k}
aybs248@cis106:~/lab6$ tree wallpapers/
4 directories, θ files
  aybs248@cis106:~/lab6$ mkdir -p assets/{imgs,video}/{large,small}
aybs248@cis106:~/lab6$ tree assets/
       — large
— small
 δ directories, 0 files
  aybs248@cis106:~/lab6$ mkdir -p docs/books/{history,math}/{fall,spring}
aybs248@cis106:~/lab6$ tree docs/
        history
fall
spring
          math
— fall
— spring
  directories, 0 files
aybs248@cis106:~/lab6$ touch docs/books/{history,math}/{fall,spring}/book.pdf
aybs248@cis106:~/lab6$ tree docs/
               fall

└─ book.pdf
               book.pdf
                  book.pdf
               spring
└─ book.pdf
 directories, 4 files
aybs248@cis106:~/lab6$
 maybs248@cis106:~/lab6$ mkdir -p books/{books/{math,science}/{epub,pdf},magazines/{computers,ru
nning, videogames}/{fanmade, official}}
 maybs248@cis106:~/lab6$ tree books/
                 — epub
— pdf
```

Question 5

17 directories, 0 files

```
maybs248@cis106:~/lab6$ cd
naybs248@cis106:~$ mkdir lab6-q5
naybs248@cis106:~$ cd /
maybs248@cis106:/$ touch ~/lab6-q5/{program.py,people.csv,data.xls}
maybs248@cis106:/$ cd /usr/share
naybs248@cis106:/usr/share$ mkdir ~/lab6-q5/movies
maybs248@cis106:/usr/share$ touch ~/lab6-q5/movies/{movies.lst,marvel.txt,disney.doc}
maybs248@cis106:/usr/share$ rm ~/lab6-q5/{program.py,people.csv}/{marvel.txt,disney.doc}
rm: cannot remove '/home/maybs248/lab6-q5/program.py/marvel.txt': Not a directory
rm: cannot remove '/home/maybs248/lab6-q5/program.py/disney.doc': Not a directory
rm: cannot remove '/home/maybs248/lab6-q5/people.csv/marvel.txt': Not a directory
rm: cannot remove '/home/maybs248/lab6-q5/people.csv/disney.doc': Not a directory
maybs248@cis106:/usr/share$ rm ~/lab6-q5/{program.py,people.csv}/{marvel.txt,disney.doc}}
rm: cannot remove '/home/maybs248/lab6-q5/program.py/marvel.txt}': Not a directory
rm: cannot remove '/home/maybs248/lab6-q5/program.py/disney.doc}': Not a directory
rm: cannot remove '/home/maybs248/lab6-q5/people.csv/marvel.txt}': Not a directory
rm: cannot remove '/home/maybs248/lab6-q5/people.csv/disney.doc}': Not a directory
maybs248@cis106:/usr/share$ rm ~/lab6-q5/{program.py,people.csv}
maybs248@cis106:/usr/share$ rm ~/lab6-q5/movies/{disney.doc,marvel.txt}
maybs248@cis106:/usr/share$
```

Challenge

```
maybs248@cis106:/usr/share$ cd
maybs248@cis106:~$ curl https://cis106.com/assets/lab6cq.sh | bash
 % Total
            % Received % Xferd Average Speed
                                              Time
                                                       Time
                                                               Time Current
                               Dload Upload
                                               Total
                                                       Spent
                                                               Left Speed
     170 100
               170
                       0
                             0
                                 502
                                          0 --:--:--
maybs248@cis106:~$ cd challenge-Lab6/
naybs248@cis106:~/challenge-Lab6$ mkdir -p challenge-lab6/{audio/{aac,mp3},docs/{docx,pdf,xls},
images/{jpg,png}}
maybs248@cis106:~/challenge-Lab6$ tree challenge-lab6/
      - jpg
10 directories, 0 files
```

```
maybs248@cis106:~/challenge-Lab6$ cd
maybs248@cis106:~$ ls -A challenge-Lab6/*.aac
challenge-Lab6/song1.aac challenge-Lab6/song2.aac challenge-Lab6/song3.aac
maybs248@cis106:~$ ls -A challenge-Lab6/*.mp3
challenge-Lab6/song1.mp3 challenge-Lab6/song2.mp3 challenge-Lab6/song3.mp3
maybs248@cis106:~$ ls -A challenge-Lab6/*.docx
challenge-Lab6/docs1.docx challenge-Lab6/docs2.docx challenge-Lab6/docs3.docx
maybs248@cis106:~$ ls -A challenge-Lab6/*.pdf
challenge-Lab6/docs1.pdf challenge-Lab6/docs2.pdf challenge-Lab6/docs3.pdf
maybs248@cis106:~$ ls -A challenge-Lab6/*.xls
ls: cannot access 'challenge-Lab6/*.xls': No such file or directory
maybs248@cis106:~$ ls -A challenge-Lab6/*.jpg
challenge-Lab6/image1.jpg challenge-Lab6/image2.jpg challenge-Lab6/image3.jpg
maybs248@cis106:~$ ls -A challenge-Lab6/image2.png challenge-Lab6/image3.png
maybs248@cis106:~$ mv challenge-Lab6/*.aac challenge-Lab6/challenge-Lab6/audio/aac/
maybs248@cis106:~$ mv challenge-Lab6/*.mp3 challenge-Lab6/challenge-lab6/audio/mp3/
```

```
maybs248@cis106:~$ mv challenge-Lab6/*.docx ls challenge-Lab6/challenge-lab6/docs/docx
mv: cannot stat 'ls': No such file or directory
maybs248@cis106:~$ mv challenge-Lab6/*.docx challenge-Lab6/challenge-lab6/docs/docx
mv: cannot stat 'challenge-Lab6/*.docx': No such file or directory
maybs248@cis106:~$ mv challenge-Lab6/*.docx challenge-Lab6/challenge-lab6/docs/docx
mv: cannot stat 'challenge-Lab6/*.docx': No such file or directory
maybs248@cis106:~$ mv challenge-Lab6/*.jpg challenge-Lab6/challenge-lab6/images/jpg
maybs248@cis106:~$ mv challenge-Lab6/*.png challenge-Lab6/challenge-lab6/images/png
maybs248@cis106:~$ ls -A challenge-Lab6/*.pdf
challenge-Lab6/docs1.pdf challenge-Lab6/docs2.pdf challenge-Lab6/docs3.pdf
maybs248@cis106:~$ mv challenge-Lab6/*.pdf challenge-Lab6/challenge-lab6/docs/pdf
 maybs248@cis106:~$
 maybs248@cis106:~$ ls -A challenge-Lab6/*.doc
challenge-Lab6/docs1.doc challenge-Lab6/docs2.doc challenge-Lab6/docs3.doc
maybs248@cis106:~$ mv challenge-Lab6/*.doc challenge-Lab6/challenge-lab6/docs/docx
 maybs248@cis106:~$ ls -A challenge-Lab6/*.gif
 maybs248@cis106:~$ mv challenge-Lab6/*.gif challenge-Lab6/challenge-lab6/images/jpg
                                  6$ mkdir challenge-lab6/docs/languages
haybs248@cis106:~/challenge-Lab6$ cd
naybs248@cis106:~\challenge-Lab6b$ cd
naybs248@cis106:~\s mv challenge-Lab6/*.py challenge-Lab6/docs/languages
nv: cannot move 'challenge-Lab6/programs.py' to 'challenge-Lab6/docs/languages': No such file or directory
naybs248@cis106:~\s mv challenge-Lab6/*.py challenge-Lab6/challenge-lab6/docs/languages/
naybs248@cis106:~\s mv challenge-Lab6/*.rb challenge-Lab6/challenge-lab6/docs/languages/
naybs248@cis106:~\s mv challenge-Lab6/*.sh challenge-Lab6/challenge-lab6/docs/languages/
naybs248@cis106:~\s mv challenge-Lab6/*.go challenge-Lab6/challenge-lab6/docs/languages/
naybs248@cis106:~\s tree challenge-Lab6/
challenge-Lab6/*.sh file or directory

    docs1.doc

               docs1.docxdocs2.doc

    docs2.docx

                - docs3.doc

    docs3.docx

                - programs.go
                 programs.py
                 programs.rb
                 programs.sh
                docs1.pdf
               docs2.pdfdocs3.pdf
```