

Question 1

```

gpacheco@cis106vm: ~
gpacheco@cis106vm: ~
gpacheco@cis106vm:~$ ls lab6/*.log
lab6/88_Application-log.log  lab6/etex.log          lab6/pdfetex.log
lab6/alternatives.log       lab6/fontconfig.log    lab6/term.log
lab6/apache01-error.log     lab6/gpu-manager.log   lab6/tex.log
lab6/apache22.log           lab6/history.log       lab6/ubuntu-advantage.log
lab6/apport.log             lab6/http404.log       lab6/ubuntu-advantage-timer.log
lab6/auth.log               lab6/kern.log          lab6/unattended-upgrades-dpkg.log
lab6/bootstrap.log          lab6/luahbtex.log      lab6/unattended-upgrades.log
lab6/casper.log             lab6/luatex.log        lab6/unattended-upgrades-shutdown.log
lab6/dpkg.log               lab6/mf.log            lab6/updmap.log
lab6/dvluatex.log           lab6/pdfetex.log       lab6/vboxadd-setup.log
gpacheco@cis106vm:~$ mkdir lab6/log-files
gpacheco@cis106vm:~$ mv lab6/*.log lab6/log-files/
gpacheco@cis106vm:~$ ls /etc/*.conf
/etc/adduser.conf          /etc/fuse.conf          /etc/libaudit.conf      /etc/rygel.conf
/etc/apg.conf              /etc/gai.conf           /etc/logrotate.conf     /etc/sensors3.conf
/etc/appstream.conf        /etc/hdparm.conf        /etc/mke2fs.conf        /etc/sudo.conf
/etc/brltty.conf           /etc/host.conf          /etc/nftables.conf      /etc/sudo_logsrvd.conf
/etc/ca-certificates.conf  /etc/inxi.conf          /etc/nsswitch.conf       /etc/sysctl.conf
/etc/debconf.conf          /etc/kernel-img.conf    /etc/pam.conf            /etc/ucf.conf
/etc/deluser.conf          /etc/kerneleloops.conf  /etc/pnm2ppa.conf        /etc/usb_modeswitch.conf
/etc/e2scrub.conf          /etc/ld.so.conf          /etc/resolv.conf         /etc/xattr.conf
/etc/fprntd.conf           /etc/libao.conf         /etc/rsyslog.conf
gpacheco@cis106vm:~$ ls -lSgGh --time-style=%D /etc/h*.conf /etc/p*.conf
-rw-r--r-- 1 7.5K 08/09/22 /etc/pnm2ppa.conf
-rw-r--r-- 1 4.4K 12/15/20 /etc/hdparm.conf
-rw-r--r-- 1 552 08/11/20 /etc/pam.conf
-rw-r--r-- 1 92 10/15/21 /etc/host.conf
gpacheco@cis106vm:~$

```

Question 2

```

gpacheco@cis106vm: ~/lab6
gpacheco@cis106vm: ~/lab6
gpacheco@cis106vm:~/lab6$ ls .??*
.appveyor.yml      .eslintrc.js        .jshintignore        .prettierrc.yaml
.auto-changelog    .eslintrc.json      .jshintrc           .prettierrc.yaml
.babelrc           .eslintrc.yml       .keep               .profile
.bash_history       .gitattributes       .last_revision      .sudo_as_admin_successful
.bash_logout        .gitconfig          .lessht             .tern-project
.bashrc             .gitignore          .lint               .testignore
.changed           .gitkeep            .metadata-v2        .tm_properties
.cis106.png         .gitmodules         .meta.isrunning     .tonic_example.js
.coveralls.yml      .gsd-keyboard.settings-ported .min-wd             .travis.yml
.dir-locals.el      .hidden             .npmignore          .vboxclient-clipboard.pid
.editorconfig       .htaccess           .nycrc              .vboxclient-draganddrop.pid
.envrc              .istanbul.yml        .obsolete           .vboxclient-seamless.pid
.eslintignore       .jscs.json          .padding            .vboxclient-vmsvga-session-tty2.pid
.eslintrc           .jscsrc             .parentlock         .vsixmanifest
gpacheco@cis106vm:~/lab6$ ls -A *.??
file_00.sh file_01.sh file_02.sh file_03.sh file_04.sh file_05.sh
gpacheco@cis106vm:~/lab6$ ls l?st*
last.txt list.txt lost.txt
gpacheco@cis106vm:~/lab6$ ls _??.*
ls: cannot access '_??.*': No such file or directory
gpacheco@cis106vm:~/lab6$ ls *??.*
file_00.sh file_01.sh file_02.sh file_03.sh file_04.sh file_05.sh
gpacheco@cis106vm:~/lab6$

```

Question 3

```
gpacheco@cis106vm: ~/lab6
gpacheco@cis106vm: ~/lab6
gpacheco@cis106vm:~$ cd lab6/
gpacheco@cis106vm:~/lab6$ ls [A-Z]*
Document.doc  Expenses.xls
gpacheco@cis106vm:~/lab6$ ls [A-Z0-9]*
25Games.lst  Document.doc  Expenses.xls
gpacheco@cis106vm:~/lab6$ ls *[0-9]*
25Games.lst  file_00.sh  file_02.sh  file_04.sh  trip22-info.doc
apache03.err  file_01.sh  file_03.sh  file_05.sh
gpacheco@cis106vm:~/lab6$ ls [a-z]*[0-9].*
apache03.err  file_00.sh  file_01.sh  file_02.sh  file_03.sh  file_04.sh  file_05.sh
gpacheco@cis106vm:~/lab6$
```

Question 4

Problem 1

```
gpacheco@cis106vm: ~/lab6
gpacheco@cis106vm: ~/lab6
gpacheco@cis106vm:~/lab6$ mkdir -p wallpapers/cars/{1080p,2k,4k}
gpacheco@cis106vm:~/lab6$ tree wallpapers/
wallpapers/
├── cars
│   ├── 1080p
│   ├── 2k
│   └── 4k
4 directories, 0 files
gpacheco@cis106vm:~/lab6$
```

Problem 2

```
gpacheco@cis106vm: ~/lab6
gpacheco@cis106vm: ~/lab6
gpacheco@cis106vm:~/lab6$ mkdir -p assets/{imgs,videos}/{large,small}
gpacheco@cis106vm:~/lab6$ tree assets/
assets/
├── imgs
│   ├── large
│   └── small
└── videos
    ├── large
    └── small
6 directories, 0 files
gpacheco@cis106vm:~/lab6$
```

Problem 3

```
gpacheco@cis106vm: ~/lab6
gpacheco@cis106vm: ~/lab6
gpacheco@cis106vm:~/lab6$ mkdir -p docs/books/{his,math}/{fall,spring}
gpacheco@cis106vm:~/lab6$ tree docs/
docs/
├── books
│   ├── his
│   │   ├── fall
│   │   └── spring
│   └── math
│       ├── fall
│       └── spring
7 directories, 0 files
gpacheco@cis106vm:~/lab6$ touch docs/books/{his,math}/{fall,spring}/book.pdf
gpacheco@cis106vm:~/lab6$ tree docs/
docs/
├── books
│   ├── his
│   │   ├── fall
│   │   │   └── book.pdf
│   │   └── spring
│   │       └── book.pdf
│   └── math
│       ├── fall
│       │   └── book.pdf
│       └── spring
│           └── book.pdf
7 directories, 4 files
gpacheco@cis106vm:~/lab6$
```

Problem 4

```
gpacheco@cis106vm: /usr/share
gpacheco@cis106vm: /usr/share
gpacheco@cis106vm:~/lab6$ mkdir ~/lab6-q5
gpacheco@cis106vm:~/lab6$ cd
gpacheco@cis106vm:~$ touch ~/lab6-q5/{program.py,people.csv,data.xls}
gpacheco@cis106vm:~$ cd /usr/share/
gpacheco@cis106vm:/usr/share$ mkdir ~/lab6-q5/movies
gpacheco@cis106vm:/usr/share$ touch ~/lab6-q5/movies/{movies.lst,movie.txt,disney.doc}
gpacheco@cis106vm:/usr/share$ rm ~/lab6-q5/{program.py,people.csv,/movies/{disney.doc,movie.txt}}
gpacheco@cis106vm:/usr/share$ tree ~/lab6-q5/
/home/gpacheco/lab6-q5/
├── data.xls
└── movies
    └── movies.lst
1 directory, 2 files
gpacheco@cis106vm:/usr/share$
```

Challenge Question

```

gpacheco@cis106vm: ~
gpacheco@cis106vm: ~/challenge-Lab6

gpacheco@cis106vm:~$ curl https://cis106.com/assets/lab6cq.sh | bash
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total     Spent    Left     Speed
00  165  100  165    0    0   834      0  --:--:--  --:--:--  --:--:--   837
gpacheco@cis106vm:~$ mkdir -p ~/challenge-Lab6/audio/{aac,mp3} ~/challenge-Lab6/docs/{docx,pdf,xls} ~/ch
allenge-Lab6/images/{png,jpg}
gpacheco@cis106vm:~$ mv ~/challenge-Lab6/*.aac ~/challenge-Lab6/audio/aac/
gpacheco@cis106vm:~$ mv ~/challenge-Lab6/*.mp3 ~/challenge-Lab6/audio/mp3/
gpacheco@cis106vm:~$ mv ~/challenge-Lab6/*.docx ~/challenge-Lab6/docs/docx/
gpacheco@cis106vm:~$ mv ~/challenge-Lab6/*.pdf ~/challenge-Lab6/docs/pdf/
gpacheco@cis106vm:~$ mv ~/challenge-Lab6/*.png ~/challenge-Lab6/images/png/
gpacheco@cis106vm:~$ mv ~/challenge-Lab6/*.jpg ~/challenge-Lab6/images/jpg/
gpacheco@cis106vm:~$ tree ~/challenge-Lab6/
home/gpacheco/challenge-Lab6/
├── audio
│   ├── aac
│   │   ├── song1.aac
│   │   └── song2.aac
│   └── mp3
│       ├── song1.mp3
│       └── song2.mp3
├── docs
│   ├── docx
│   │   ├── docs1.docx
│   │   └── docs2.docx
│   ├── pdf
│   │   ├── docs1.pdf
│   │   └── docs2.pdf
│   └── xls
├── image1.gif
├── image2.gif
├── images
│   └── jpg
└── jpg

```

```

gpacheco@cis106vm: ~
gpacheco@cis106vm: ~/challenge-Lab6

gpacheco@cis106vm:~$ tree ~/challenge-Lab6/
home/gpacheco/challenge-Lab6/
├── audio
│   ├── aac
│   │   ├── song1.aac
│   │   └── song2.aac
│   └── mp3
│       ├── song1.mp3
│       └── song2.mp3
├── docs
│   ├── docx
│   │   ├── docs1.docx
│   │   └── docs2.docx
│   ├── pdf
│   │   ├── docs1.pdf
│   │   └── docs2.pdf
│   └── xls
├── image1.gif
├── image2.gif
├── images
│   ├── jpg
│   │   ├── image1.jpg
│   │   └── image2.jpg
│   └── png
│       ├── image1.png
│       └── image2.png
├── program.go
├── program.py
├── program.rb
├── program.sh
└── 0 directories, 18 files
gpacheco@cis106vm:~$

```

