

Question 1

```
1: tjyoung@cis106: ~ ✓

lab6/dvluatex.log      lab6/tex.log
lab6/etex.log           lab6/ubuntu-advantage.log
lab6/fontconfig.log     lab6/unattended-upgrades-shutdown.log
lab6/gpu-manager.log    lab6/updmap.log
lab6/history.log        lab6/vboxadd-setup.log

tjyoung@cis106:~$ mkdir lab6/log-files
tjyoung@cis106:~$ mv lab6/*.log lab6/log-files/
tjyoung@cis106:~$ ls -l lab6/^C
tjyoung@cis106:~$ ls /etc/*.conf

/etc/adduser.conf      /etc/host.conf        /etc/pnm2ppa.conf
/etc/apg.conf          /etc/inxi.conf        /etc/resolv.conf
/etc/appstream.conf    /etc/kernel-img.conf  /etc/rsyslog.conf
/etc/brltty.conf       /etc/kerneloops.conf  /etc/rygel.conf
/etc/ca-certificates.conf /etc/ld.so.conf       /etc/sensors3.conf
/etc/debconf.conf      /etc/libao.conf       /etc/sudo.conf
/etc/deluser.conf      /etc/libaudit.conf    /etc/sudo_logsrvd.conf
/etc/e2scrub.conf      /etc/logrotate.conf   /etc/sysctl.conf
/etc/fprintd.conf      /etc/mke2fs.conf      /etc/ucf.conf
/etc/fuse.conf          /etc/nftables.conf    /etc/usb_modeswitch.conf
/etc/gai.conf          /etc/nsswitch.conf    /etc/xattr.conf
/etc/hdparm.conf       /etc/pam.conf

tjyoung@cis106:~$

tjyoung@cis106:~$ ls lab6/*.log
lab6/88_Application-log.log  lab6/http404.log
lab6/alternatives.log      lab6/kern.log
lab6/apache2-error.log     lab6/luabtex.log
lab6/apache22.log          lab6/luatex.log
lab6/auth.log              lab6/mf.log
lab6/bootstrap.log        lab6/pdfetex.log
lab6/casper.log            lab6/pdfetex.log
lab6/dbkg.log              lab6/term.log
lab6/dvluatex.log          lab6/tex.log
lab6/etex.log              lab6/ubuntu-advantage.log
lab6/fontconfig.log        lab6/unattended-upgrades-shutdown.log
lab6/gpu-manager.log       lab6/updmap.log
lab6/history.log           lab6/vboxadd-setup.log

tjyoung@cis106:~$ mkdir lab6/log-files
tjyoung@cis106:~$ mv lab6/*.log lab6/log-files/
tjyoung@cis106:~$ ls -l lab6/^C
tjyoung@cis106:~$ ls /etc/*.conf
/etc/adduser.conf      /etc/host.conf        /etc/pnm2ppa.conf
/etc/apg.conf          /etc/inxi.conf        /etc/resolv.conf
/etc/appstream.conf    /etc/kernel-img.conf  /etc/rsyslog.conf
/etc/brltty.conf       /etc/kerneloops.conf  /etc/rygel.conf
/etc/ca-certificates.conf /etc/ld.so.conf       /etc/sensors3.conf
/etc/debconf.conf      /etc/libao.conf       /etc/sudo.conf
/etc/deluser.conf      /etc/libaudit.conf    /etc/sudo_logsrvd.conf
/etc/e2scrub.conf      /etc/logrotate.conf   /etc/sysctl.conf
/etc/fprintd.conf      /etc/mke2fs.conf      /etc/ucf.conf
/etc/fuse.conf          /etc/nftables.conf    /etc/usb_modeswitch.conf
/etc/gai.conf          /etc/nsswitch.conf    /etc/xattr.conf
/etc/hdparm.conf       /etc/pam.conf

tjyoung@cis106:~$ ls /etc/h*.conf /etc/p*.conf
/etc/hdparm.conf  /etc/host.conf  /etc/pam.conf  /etc/pnm2ppa.conf
tjyoung@cis106:~$ ls -lsgch --time-style=+%b /etc/h*.conf /etc/p*.conf
8.0K -rw-r--r-- 1 4.4K 12/15/20 /etc/hdparm.conf
4.0K -rw-r--r-- 1 92 10/15/21 /etc/host.conf
4.0K -rw-r--r-- 1 552 08/11/20 /etc/pam.conf
8.0K -rw-r--r-- 1 7.5K 08/07/23 /etc/pnm2ppa.conf
tjyoung@cis106:~$

tjyoung@cis106:~$ ls -ls
total 2268
4 drwxrwxr-x 2 tjyoung tjyoung 4096 Mar  6 18:05 assets
4 drwxrwxr-x 2 tjyoung tjyoung 4096 Mar  6 18:01 cars
4 drwxrwxr-x 10 tjyoung tjyoung 4096 Apr  7 18:14 cis106
4 drwxr-xr-x 2 tjyoung tjyoung 4096 Feb  5 14:29 Desktop
4 drwxr-xr-x 3 tjyoung tjyoung 4096 Apr  7 18:16 Downloads
4 drwxrwxr-x 2 tjyoung tjyoung 4096 Mar  6 17:50 games
4 -rw-rw-r-- 1 tjyoung tjyoung 983 Feb  5 16:16 github.commands.t
4 drwxrwxr-x 2 tjyoung tjyoung 4096 Mar  6 17:51 hone
4 drwxrwxr-x 3 tjyoung tjyoung 4096 Mar 29 16:27 lab5ChallengeQues
4 drwxrwxr-x 2 tjyoung tjyoung 4096 Mar 29 15:16 labs-docs
4 drwxrwxr-x 3 tjyoung tjyoung 4096 Apr  7 18:26 lab6
4 drwxr-xr-x 2 tjyoung tjyoung 4096 Feb  5 14:29 Music
4 drwxr-xr-x 5 tjyoung tjyoung 4096 Mar 29 15:50 Pictures
2180 -rw-rw-r-- 1 tjyoung tjyoung 2229212 Mar  4 21:36 practicles.tar.xz
4 drwxr-xr-x 2 tjyoung tjyoung 4096 Feb  5 14:29 Public
4 drwxrwxr-x 2 tjyoung tjyoung 4096 Mar 15 13:20 scripts
4 -rw-rw-r-- 1 tjyoung tjyoung 329 Feb  5 15:11 script.sh
4 drwx----- 5 tjyoung tjyoung 4096 Feb 26 16:59 snap
4 drwxr-xr-x 2 tjyoung tjyoung 4096 Feb  5 14:29 Templates
4 drwxrwxr-x 2 tjyoung tjyoung 4096 Feb  5 15:29 TrevorYoungCS
4 drwxr-xr-x 2 tjyoung tjyoung 4096 Feb  5 14:29 Videos
4 drwxrwxr-x 2 tjyoung tjyoung 4096 Mar  6 17:51 wallpapers
tjyoung@cis106:~$
```

Question 2

```

tjyoung@cis106: ~/lab6
tjyoung@cis106:~/lab6$ ls .??*
auto-changelog      .goutputstream-PNAEK2      .lint
babelrc              .gsd-keyboard.settings-ported .lock
bash_history         .hidden                    .MERGE_MSG.swp
bash_logout          .hidden1.doc               .metadata-v2
bashrc               .hidden1.py                .meta.isrunning
changed              .hidden2.doc               .min-wd
coveralls.yml        .hidden2.py                .npmignore
dir-locals.el        .hiddenFile.txt            .nycrc
editorconfig         .htaccess                  .org.chromium.Chromium.JeqcQC
eslintignore         .ignore                    .org.chromium.Chromium.SBDLyW
eslintrc             .istanbul.yml              .padding
eslintrc.js          .jscs.json                 .parentlock
eslintrc.json        .jscsrc                    .png
eslintrc.yml         .jshintignore               .prettierrc
gitattributes        .jshintrc                  .prettierrc.yaml
gitconfig            .keep                      .profile
gitkeep              .last_revision             .releaserc.json
gitmodules           .lessht                    .spmignore
tjyoung@cis106:~/lab6$ ls -a
.                  file_02.sh              .jshintintrc
5Games.lst         file_03.sh              .keep
apache3.err        file_04.sh              .last_revision
auto-changelog     file_05.sh              last.txt
babelrc            .gitattributes          .lessht
bash_history       .gitconfig              list.txt
bash_logout        .gitkeep                .lock
bashrc             .gitmodules             log-files
changed            .goutputstream-PNAEK2   lost.txt
coveralls.yml      .gsd-keyboard.settings-ported
dir-locals.el      .hidden                 .MERGE_MSG.swp
document.doc       .hidden1.doc            .meta.isrunning
editorconfig       .hidden1.py             .min-wd
eslintignore       .hidden2.doc            .npmignore
eslintrc           .hidden2.py             .nycrc
eslintrc.js        .hiddenFile.txt         .org.chromium.Chromium.JeqcQC
eslintrc.json      .htaccess               .org.chromium.Chromium.SBDLyW
eslintrc.yml       .ignore                 .padding
expenses.xls       .istanbul.yml           .parentlock
file_00.sh         .jscs.json              .png
file_01.sh         .jscsrc                 .prettierrc
file_02.sh         .jshintignore            .prettierrc.yaml
file_03.sh         .jshintrc               .profile
file_04.sh         .keep                   .releaserc.json
file_05.sh         .last_revision          .spmignore
lost.txt           .lint                   .sudo_as_admin_successful
list.txt           .list.txt               .tern-project
lost.txt           .lock                   .testignore
log-files          .lost.txt               .tm_properties
lost.txt           .MERGE_MSG.swp         .tonic_example.js
lost.txt           .meta.isrunning        .travis.yml
lost.txt           .min-wd                 trip22-info.doc
lost.txt           .npmignore              .vboxclient-clipboard-tty2-control.pid
lost.txt           .nycrc                  .vboxclient-clipboard-tty2-service.pid
lost.txt           .org.chromium.Chromium.JeqcQC
lost.txt           .org.chromium.Chromium.SBDLyW
lost.txt           .padding                .vboxclient-draganddrop-tty2-control.pid
lost.txt           .parentlock             .vboxclient-draganddrop-tty2-service.pid
lost.txt           .png                    .vboxclient-hostversion-tty2-control.pid
lost.txt           .prettierrc             .vboxclient-hostversion-tty2-service.pid
lost.txt           .prettierrc.yaml        .vboxclient-seamless-tty2-control.pid
lost.txt           .profile                .vboxclient-seamless-tty2-service.pid
lost.txt           .releaserc.json         .vboxclient-vmsvga-session-tty2-control.pid
lost.txt           .spmignore              .vboxclient-vmsvga-session-tty2-service.pid
lost.txt           .sudo_as_admin_successful
lost.txt           .tern-project           .vscode.trashinfo
lost.txt           .testignore             .vsixmanifest
lost.txt           .tm_properties
lost.txt           .tonic_example.js
lost.txt           .travis.yml
lost.txt           trip22-info.doc
lost.txt           .vboxclient-clipboard-tty2-control.pid
lost.txt           .vboxclient-clipboard-tty2-service.pid
lost.txt           .vboxclient-draganddrop-tty2-control.pid
lost.txt           .vboxclient-draganddrop-tty2-service.pid
lost.txt           .vboxclient-hostversion-tty2-control.pid
lost.txt           .vboxclient-hostversion-tty2-service.pid
lost.txt           .vboxclient-seamless-tty2-control.pid
lost.txt           .vboxclient-seamless-tty2-service.pid
lost.txt           .vboxclient-vmsvga-session-tty2-control.pid
lost.txt           .vboxclient-vmsvga-session-tty2-service.pid
lost.txt           .vscode.trashinfo
lost.txt           .vsixmanifest

```

Question 3

```

1/1 + 
tjyoung@cis106: ~/lab6
tjyoung@cis106:~/lab6$ ls [A-Z]*
Document.doc Expenses.xls
tjyoung@cis106:~/lab6$ ls [A-Z0-9]*
25Games.lst Document.doc Expenses.xls
tjyoung@cis106:~/lab6$ ls *[0-9]*
25Games.lst apache3.err file_00.sh file_01.sh file_02.sh file_03.sh file_04.sh file_05.sh trip22-info.doc
tjyoung@cis106:~/lab6$ ls [a-z]*[0-9]*
apache3.err file_00.sh file_01.sh file_02.sh file_03.sh file_04.sh file_05.sh
tjyoung@cis106:~/lab6$

```

Question 4

```
tjyoung@cis106:~/lab6$  
tjyoung@cis106:~/lab6$ mkdir -p wallpapers/{cars}/{1080p,2k,4k}  
tjyoung@cis106:~/lab6$ tree wallpapers/  
wallpapers/  
├── {cars}  
│   ├── 1080p  
│   ├── 2k  
│   └── 4k  
└── cars  
    └── 1080p  
  
6 directories, 0 files  
tjyoung@cis106:~/lab6$ rm -r wallpapers/  
tjyoung@cis106:~/lab6$ mkdir -p wallpapers/{cars}/{1080p,2k,4k}  
tjyoung@cis106:~/lab6$ tree wallpapers/  
wallpapers/  
├── {cars}  
│   ├── 1080p  
│   ├── 2k  
│   └── 4k  
  
4 directories, 0 files  
tjyoung@cis106:~/lab6$ tree wallpapers/
```

```
└── 1080p  
  
6 directories, 0 files  
tjyoung@cis106:~/lab6$ rm -r wallpapers/  
tjyoung@cis106:~/lab6$ mkdir -p wallpapers/{cars}/{1080p,2k,4k}  
tjyoung@cis106:~/lab6$ tree wallpapers/  
wallpapers/  
├── {cars}  
│   ├── 1080p  
│   ├── 2k  
│   └── 4k  
  
4 directories, 0 files  
tjyoung@cis106:~/lab6$ mkdir -p assets/{imgs,videos}/{large,small}  
tjyoung@cis106:~/lab6$ tree assets/  
assets/  
├── imgs  
│   ├── large  
│   └── small  
└── videos  
    ├── large  
    └── small  
  
6 directories, 0 files  
tjyoung@cis106:~/lab6$
```



```
├── 1080p
├── 2k
└── 4k

4 directories, 0 files
tjyoung@cis106:~/lab6$ mkdir -p assets/{imgs,videos}/{large,small}
tjyoung@cis106:~/lab6$ tree assets/
assets/
├── imgs
│   ├── large
│   └── small
└── videos
    ├── large
    └── small

6 directories, 0 files
tjyoung@cis106:~/lab6$ mkdir -p docs/books/{his,math}/{fall,spring}
tjyoung@cis106:~/lab6$ touch -p docs/books/{his,math}/{fall,spring}/book.pdf
touch: invalid option -- 'p'
Try 'touch --help' for more information.
tjyoung@cis106:~/lab6$ touch docs/books/{his,math}/{fall,spring}/book.pdf
tjyoung@cis106:~/lab6$ tree docs/
docs/
├── books
│   ├── his
│   │   ├── fall
│   │   │   └── book.pdf
│   │   └── spring
│   │       └── book.pdf
│   └── math
│       ├── fall
│       │   └── book.pdf
│       └── spring
│           └── book.pdf

7 directories, 4 files
tjyoung@cis106:~/lab6$
```

```

1: tjyoung@cis106: /usr/share ~
tjyoung@cis106:~/lab6$ mkdir ~/lab6-q5
tjyoung@cis106:~/lab6$ cd /
tjyoung@cis106:/$ touch ~/lab6-q5/{program.py,people.csv,data.xls}
bash: touch ~/lab6-q5/program.py: No such file or directory
tjyoung@cis106:/$ touch ~/lab6-q5/{program.py,people.csv,data.xls}
tjyoung@cis106:/$ cd /usr/share/
tjyoung@cis106:/usr/share$ mkdir ~/lab6-q5/movies
mkdir: cannot create directory '~/lab6-q5/movies': No such file or directory
tjyoung@cis106:/usr/share$ mkdir ~/lab6-q5/movies
tjyoung@cis106:/usr/share$ touch ~/lab6-q5/movies/{movies.lst,movie.txt,disney.doc
tjyoung@cis106:/usr/share$ touch ~/lab6-q5/movies/{movies.lst,movie.txt,disney.doc}
tjyoung@cis106:/usr/share$ rm ~/lab6-q5/
rm: cannot remove '/home/tjyoung/lab6-q5/': Is a directory
tjyoung@cis106:/usr/share$ rm ~/lab6-q5/{program.py,people.csv,/movies/{disney.doc,movie.txt}}
tjyoung@cis106:/usr/share$ tree lab6-q5/
lab6-q5/ [error opening dir]

0 directories, 0 files
tjyoung@cis106:/usr/share$ tree ~/lab6-q5/
/home/tjyoung/lab6-q5/
├── data.xls
└── movies
    ├── movies.lst
    └── {movies.lst,movie.txt,disney.doc}

1 directory, 3 files
tjyoung@cis106:/usr/share$

```

Challenge question

```

tjyoung@cis106:~$ ls challenge-Lab6
docs1.docx  image1.png  program.rb
docs1.pdf   image2.gif   program.sh
docs2.docx  image2.jpg   song1.aac
docs2.pdf   image2.png   song1.mp3
image1.gif  program.go   song2.aac
image1.jpg  program.py   song2.mp3
tjyoung@cis106:~$ ls challenge-Lab6
audio      docs2.pdf   image1.png  imgs      programs    song2.aac
docs1.docx docx         image2.gif  program.go program.sh   song2.mp3
docs1.pdf  image1.gif  image2.jpg  program.py song1.aac
docs2.docx image1.jpg  image2.png  program.rb song1.mp3
tjyoung@cis106:~$

```

incomplete finish as practice tomorrow

