

# Lab 6

## Question 1

```
jsamaan@cis106:~$ curl https://cis106.com/assets/lab6.sh | bash
% Total % Received % Xferd Average Speed Time Time Current
Dload Upload Total Spent Left Speed
100 425 100 425 0 0 1663 0 --:--:-- --:--:-- --:--:-- 1666
jsamaan@cis106:~$ ls lab6/*.log
lab6/88_Application-log.log lab6/kern.log
lab6/alternatives.log lab6/luahbtex.log
lab6/apache01-error.log lab6/luatex.log
lab6/apache22.log lab6/mf.log
lab6/auth.log lab6/pdfetex.log
lab6/bootstrap.log lab6/pdfetex.log
lab6/casper.log lab6/term.log
lab6/dpkg.log lab6/tex.log
lab6/dvluatex.log lab6/ubuntu-advantage.log
lab6/etex.log lab6/unattended-upgrades-dpkg.log
lab6/fontconfig.log lab6/unattended-upgrades.log
lab6/gpu-manager.log lab6/unattended-upgrades-shutdown.log
lab6/history.log lab6/updmap.log
lab6/http404.log lab6/vboxadd-setup.log
jsamaan@cis106:~$ mkdir lab6/log-files
jsamaan@cis106:~$ mv lab6/*.log lab6/log-files/
jsamaan@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
jsamaan@cis106:~$ ls -lsGch --time-style=+%D /etc/h*.conf /etc/p*.conf
-rw-r--r-- 1 7.5K 08/07/23 /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
jsamaan@cis106:~$
```

## Question 2

```
jsamaan@cis106:~$ cd lab6/
jsamaan@cis106:~/lab6$ ls .??*
.auto-changelog .editorconfig .gitkeep .jshintrc .npmignore .tonic_example.js .vboxclient-seamless-tty2-service.pid
.babelrc .eslintignore .gitmodules .keep .nycrc .travis.yml .vboxclient-vmsvga-session-tty2-control.pid
.bash_history .eslintrc .gsd-keyboard.settings-ported .last_revision .padding .vboxclient-vmsvga-session-tty2-control.pid
.bash_logout .eslintrc.js .hidden .lessht .parentlock .vboxclient-clipboard-tty2-control.pid
.bashrc .eslintrc.json .htaccess .lint .profile .vboxclient-clipboard-tty2-service.pid
.changed .eslintrc.yml .istanbul.yml .metadata-v2 .sudo_as_admin_successful .vboxclient-draganddrop-tty2-control.pid
.cis106.png .gitattributes .jscss.json .meta.isrunning .tern-project .vboxclient-draganddrop-tty2-service.pid
.coveralls.yml .gitconfig .jscsrc .migrated .testignore .vboxclient-hostversion-tty2-control.pid
.dir-locals.el .gitignore .jshintignore .min-wd .tn_properties .vboxclient-seamless-tty2-control.pid
jsamaan@cis106:~/lab6$ ls -A *.??
file_00.sh file_01.sh file_02.sh file_03.sh file_04.sh file_05.sh
jsamaan@cis106:~/lab6$ ls -lSt*
last.txt list.txt lost.txt
jsamaan@cis106:~/lab6$ ls *.??*
file_00.sh file_01.sh file_02.sh file_03.sh file_04.sh file_05.sh
jsamaan@cis106:~/lab6$
```

## Question 3

```
jsamaan@cis106: ~/lab6
jsamaan@cis106:~/lab6$ ls [A-Z]*
Document.doc  Expenses.xls
jsamaan@cis106:~/lab6$ ls [A-Z0-9]*
25Games.lst  Document.doc  Expenses.xls
jsamaan@cis106:~/lab6$ ls *[0-9]*
25Games.lst  apache03.err  file_00.sh  file_01.sh  file_02.sh  file_03.sh  file_04.sh  file_05.sh  trip22-info.doc
jsamaan@cis106:~/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
jsamaan@cis106:~/lab6$
```

## Question 4

```
jsamaan@cis106:~/lab6$ mkdir -p wallpapers/{cars}/{1080p,2k,4k}
jsamaan@cis106:~/lab6$ tree wallpapers/
wallpapers/
├── cars
│   ├── 1080p
│   ├── 2k
│   └── 4k
└── 4 directories, 0 files
jsamaan@cis106:~/lab6$ rm -r wallpapers/
jsamaan@cis106:~/lab6$ mkdir -p wallpapers/cars/{1080p,2k,4k}
jsamaan@cis106:~/lab6$ tree wallpapers/
wallpapers/
├── cars
│   ├── 1080p
│   ├── 2k
│   └── 4k
└── 4 directories, 0 files
jsamaan@cis106:~/lab6$ mkdir -p assets/{imgs,videos}/{large,small}
jsamaan@cis106:~/lab6$ tree assets/
assets/
├── imgs
│   ├── large
│   └── small
└── videos
    ├── large
    └── small
└── 6 directories, 0 files
jsamaan@cis106:~/lab6$ mkdir -p docs/books/{history,math}/{fall,spring}
jsamaan@cis106:~/lab6$ touch docs/books/{history,math}/{fall,spring}/book.pdf
jsamaan@cis106:~/lab6$ tree docs/
docs/
├── books
│   ├── history
│   │   ├── fall
│   │   │   └── book.pdf
│   │   └── spring
│   │       └── book.pdf
│   └── math
│       ├── fall
│       │   └── book.pdf
│       └── spring
│           └── book.pdf
└── 7 directories, 4 files
jsamaan@cis106:~/lab6$
```

```
jsamaan@cis106:~/lab6$ mkdir ~/lab6-q5
jsamaan@cis106:~/lab6$ cd /
jsamaan@cis106:/$ touch ~/lab6-q5/{program.py,people.csv,data.xls}
jsamaan@cis106:/$ cd /usr/share/
jsamaan@cis106:/usr/share$ mkdir ~/lab6-q5/movies
jsamaan@cis106:/usr/share$ touch ~/lab6-q5/movies/{movies.lst,mарvel.txt,disney.doc}
jsamaan@cis106:/usr/share$ rm ~/lab6-q5/{program.py,people.csv,/movies/{disney.doc,mарvel.txt}}
jsamaan@cis106:/usr/share$ tree lab6-q5
lab6-q5 [error opening dir]
└── 0 directories, 0 files
jsamaan@cis106:/usr/share$ tree ~/lab6-q5
/home/jsamaan/lab6-q5
├── data.xls
└── movies
    └── movies.lst
└── 1 directory, 2 files
jsamaan@cis106:/usr/share$
```

## Challenge Question

```
jsamaan@cts106:~$ mkdir -p challenge-Lab6/{audio/{aac/{aac},mp3/{mp3}},docs/{docx/{doc},pdf/{pdf},xls/{xls}},images/{jpg/{jpg},png/{png}}}  
jsamaan@cts106:~$ cd challenge-Lab6/  
jsamaan@cts106:~/challenge-Lab6$ tree  
.  
├── audio  
│   ├── aac  
│   │   └── {aac}  
│   └── mp3  
│       └── {mp3}  
├── docs  
│   ├── docx  
│   │   └── {doc}  
│   ├── pdf  
│   │   └── {pdf}  
│   └── xls  
│       └── {xls}  
└── images  
    ├── jpg  
    │   └── {jpg}  
    └── png  
        └── {png}
```