

# Lab 6

## Question 1

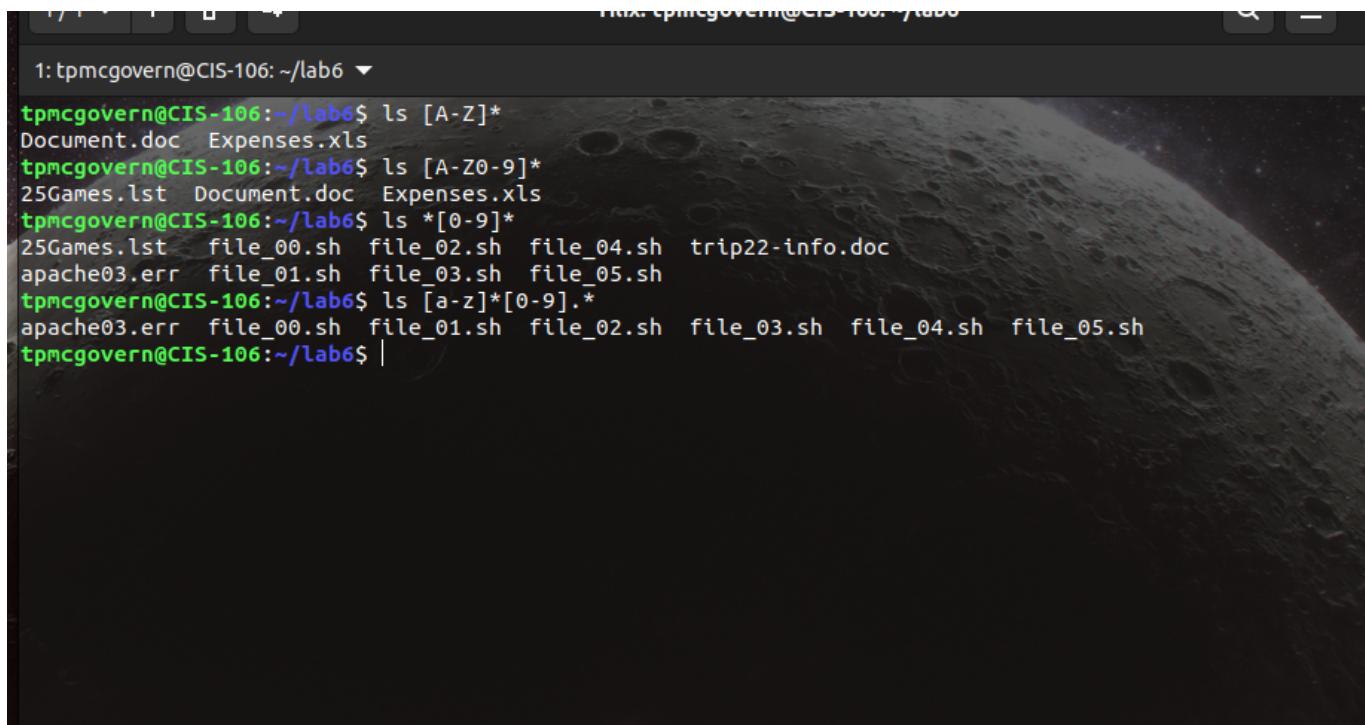
```
Lab6/gpu-manager.log      lab6/unattended-upgrades-shutdown.log
Lab6/history.log          lab6/vboxadd-setup.log
Lab6/http404.log
tpmcgovern@CIS-106:~$ mkdir lab6/log.files
tpmcgovern@CIS-106:~$ mv lab6/*.log lab6/log.files/
tpmcgovern@CIS-106:~$ ls /etc/*.conf
/etc/adduser.conf          /etc/host.conf        /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
tpmcgovern@CIS-106:~$ ls -lSgGh --timestyle=+%D /etc/h*.conf /etc/p*.conf
ls: unrecognized option '--timestyle=+%D'
Try 'ls --help' for more information.
tpmcgovern@CIS-106:~$ ls -lSgGh --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
tpmcgovern@CIS-106:~$ |
```

## Question 2

```
1 / 1 + ⌂ ⌂ Tillix: tpmcgovern@CIS-106: ~/lab6

1: tpmcgovern@CIS-106: ~/lab6 ~
pmcgovern@CIS-106:~/lab6$ ls .??*
auto-changelog           .lesshst
babelrc                  .lint
bash_history              .metadata-v2
bash_logout               .meta.isrunning
bashrc                   .min-wd
bastetrc                 .npmignore
changed                  .nycrc
coveralls.yml             .padding
dir-locals.el             .parentlock
editorconfig              .prettierignore
eslintignore              .prettierrc.yaml
eslintrc                 .profile
eslintrc.js               .releaserc.json
eslintrc.json             .spmignore
eslintrc.yml              .sudo_as_admin_successful
gitattributes             .tern-project
gitconfig                 .testignore
gitkeep                  .tm_properties
gitmodules                .tonic_example.js
gsd-keyboard.settings-ported .travis.yml
hidden                   .vboxclient-clipboard-tty2-control.pid
htaccess                 .vboxclient-clipboard-tty2-service.pid
ignore                   .vboxclient-draganddrop-tty2-control.pid
istanbul.yml              .vboxclient-draganddrop-tty2-service.pid
js                       .vboxclient-hostversion-tty2-control.pid
jscs.json                .vboxclient-seamless-tty2-control.pid
jscsrc                   .tonic_example.js
jshintignore              .travis.yml
jshintrc                 .vboxclient-clipboard-tty2-control.pid
keep                     .vboxclient-clipboard-tty2-service.pid
.last_revision            .vboxclient-draganddrop-tty2-control.pid
.vboxclient-draganddrop-tty2-service.pid
.last_revision            .vboxclient-draganddrop-tty2-control.pid
.vboxclient-draganddrop-tty2-service.pid
.last_revision            .vboxclient-hostversion-tty2-control.pid
.vboxclient-seamless-tty2-control.pid
.last_revision            .vboxclient-seamless-tty2-service.pid
.last_revision            .vboxclient-vmsvga-session-tty2-control.pid
.last_revision            .vboxclient-vmsvga-session-tty2-service.pid
.last_revision            .vsixmanifest
pmcgovern@CIS-106:~/lab6$ ls -A *.*?
file_00.sh  file_01.sh  file_02.sh  file_03.sh  file_04.sh  file_05.sh
pmcgovern@CIS-106:~/lab6$ ls l?st*
last.txt  list.txt  lost.txt
pmcgovern@CIS-106:~/lab6$ ls *_??.*
file_00.sh  file_01.sh  file_02.sh  file_03.sh  file_04.sh  file_05.sh
pmcgovern@CIS-106:~/lab6$ |
```

## Question 3

A screenshot of a terminal window showing a list of files. The background of the window is a photograph of the Moon's surface. The terminal output is as follows:

```
1: tpmcgovern@CIS-106: ~/lab6
tpmcgovern@CIS-106:~/lab6$ ls [A-Z]*
Document.doc Expenses.xls
tpmcgovern@CIS-106:~/lab6$ ls [A-Z0-9]*
25Games.lst Document.doc Expenses.xls
tpmcgovern@CIS-106:~/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
tpmcgovern@CIS-106:~/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
tpmcgovern@CIS-106:~/lab6$ |
```

## Question 4

```
1: tpmcgovern@CIS-106: ~/lab6 ▼  
tpmcgovern@CIS-106:~/lab6$ tree wallpapers/  
wallpapers/  
└── cars  
    ├── 1080p  
    ├── 2k  
    └── 4k  
  
4 directories, 0 files  
tpmcgovern@CIS-106:~/lab6$ |
```

```
1: tpmcgovern@CIS-106: ~/lab6 ▼  
tpmcgovern@CIS-106:~/lab6$ mkdir -p assets/{imgs,videos}/{large,small}  
tpmcgovern@CIS-106:~/lab6$ tree assets/  
assets/  
├── imgs  
│   ├── large  
│   └── small  
└── videos  
    ├── large  
    └── small  
  
6 directories, 0 files  
tpmcgovern@CIS-106:~/lab6$ |
```

```
tpmcgovern@CIS-106:~/Lab6$ mkdir -p docs/books/{history,math}/{fall,spring}
tpmcgovern@CIS-106:~/Lab6$ touch docs/books/?{history,math}/{fall,spring}/book.pdf
touch: cannot touch 'docs/books/?history/fall/book.pdf': No such file or directory
touch: cannot touch 'docs/books/?history/spring/book.pdf': No such file or directory
touch: cannot touch 'docs/books/?math/fall/book.pdf': No such file or directory
touch: cannot touch 'docs/books/?math/spring/book.pdf': No such file or directory
tpmcgovern@CIS-106:~/Lab6$ touch docs/books/{history,math}/{fall,spring}/book.pdf
tpmcgovern@CIS-106:~/Lab6$ tree docs/
docs/
└── books
    ├── history
    │   ├── fall
    │   │   └── book.pdf
    │   └── spring
    │       └── book.pdf
    └── math
        ├── fall
        │   └── book.pdf
        └── spring
            └── book.pdf

7 directories, 4 files
tpmcgovern@CIS-106:~/Lab6$ |
```

```
Tilix: tpmcgovern@CIS-106: /usr/share
1: tpmcgovern@CIS-106: /usr/share ▾
tpmcgovern@CIS-106:~/Lab6$ mkdir ~/Lab6-q5
tpmcgovern@CIS-106:~/Lab6$ cd /
tpmcgovern@CIS-106:$ touch ~/Lab6-q5/{program.py,people.csv,data.xls}
tpmcgovern@CIS-106:$ cd /usr/share
tpmcgovern@CIS-106:/usr/share$ mkdir ~/Lab6-q5/movies
tpmcgovern@CIS-106:/usr/share$ touch ~/Lab6-q5/movies/{movies.lst,marvel.txt,disney.doc}
tpmcgovern@CIS-106:/usr/share$ rm ~/Lab6-q5/{program.py,people.csv,/movies/{disney.doc,marvel.txt}}
rm: cannot remove '/home/tpmcgovern/Lab6-q5/{program.py,people.csv,/movies/disney.doc}': No such file or directory
rm: cannot remove '/home/tpmcgovern/Lab6-q5/{program.py,people.csv,/movies/marvel.txt}': No such file or directory
tpmcgovern@CIS-106:/usr/share$ tree ~/Lab6-q5/
/home/tpmcgovern/Lab6-q5/
├── data.xls
└── movies
    ├── disney.doc
    ├── marvel.txt
    └── movies.lst
└── people.csv
    └── program.py

1 directory, 6 files
tpmcgovern@CIS-106:/usr/share$ rm ~/Lab6-q5/{program.py,people.csv,/movies{disney.doc,marvel.txt}}
rm: cannot remove '/home/tpmcgovern/Lab6-q5//moviesdisney.doc': No such file or directory
rm: cannot remove '/home/tpmcgovern/Lab6-q5//moviesmarvel.txt': No such file or directory
tpmcgovern@CIS-106:/usr/share$ rm ~/Lab6-q5/
rm: cannot remove '/home/tpmcgovern/Lab6-q5/': Is a directory
tpmcgovern@CIS-106:/usr/share$ rm ~/Lab6-q5/
rm: cannot remove '/home/tpmcgovern/Lab6-q5/': Is a directory
tpmcgovern@CIS-106:/usr/share$ |
```

## Challenge Question

```
tpmcgovern@CIS-106:~$ mkdir -p challenge-lab6/{audio/{aac,mp3},docs/{docx,pdf,xls},images/{jpg,png}}
tpmcgovern@CIS-106:~$ tree challenge-lab6/
challenge-lab6/
├── audio
│   ├── aac
│   └── mp3
├── docs
│   ├── docx
│   ├── pdf
│   └── xls
└── images
    ├── jpg
    └── png

10 directories, 0 files
```

```
tpmcgovern@CIS-106:~$ |
```

```
1: tpmcgovern@CIS-106: ~ ▾
tpmcgovern@CIS-106:~$ tree challenge-lab6/
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
└── images
    ├── jpg
    │   ├── image1.jpg
    │   └── image2.jpg
    └── png
        ├── image1.png
        └── image2.png
```