Question 1 | Using the * Wildcard

```
don@dono:~$ ls /etc/*.conf
/etc/adduser.conf          /etc/deluser.conf  /etc/host.conf        /etc/libaudit.conf   /etc/pam.conf                 /etc/sensors3.conf
/etc/apg.conf              /etc/e2scrub.conf  /etc/inxi.conf        /etc/logrotate.conf  /etc/pnm2ppa.conf             /etc/sysctl.conf
/etc/appstream.conf        /etc/fprintd.conf  /etc/kernel-img.conf  /etc/ltrace.conf     /etc/popularity-contest.conf  /etc/ucf.conf
/etc/brltty.conf           /etc/fuse.conf     /etc/kerneloops.conf  /etc/mke2fs.conf     /etc/resolv.conf              /etc/usb_modeswitch.conf
/etc/ca-certificates.conf  /etc/gai.conf      /etc/ld.so.conf       /etc/mtools.conf     /etc/rsyslog.conf             /etc/xattr.conf
/etc/debconf.conf          /etc/hdparm.conf   /etc/libao.conf       /etc/nsswitch.conf   /etc/rygel.conf
don@dono:~$ ls -lGghSt --time-style=+%D /etc/h*.conf /etc/p*.conf
-rw-r--r-- 1  350 02/18/22 /etc/popularity-contest.conf
-rw-r--r-- 1 7.5K 08/19/21 /etc/pnm2ppa.conf
-rw-r--r-- 1  552 12/17/19 /etc/pam.conf
-rw-r--r-- 1   92 12/05/19 /etc/host.conf
-rw-r--r-- 1 5.0K 08/21/19 /etc/hdparm.conf
```

```
don@dono:/usr/share$ ls -A themes/.*
themes/.:
Adwaita  Adwaita-dark  Default  Emacs  HighContrast  Raleigh  Yaru  Yaru-dark  Yaru-light
```

```
don@dono:~$ ls lab6/*.log
lab6/88_Application-log.log  lab6/history.log
lab6/alternatives.log       lab6/http404.log
lab6/apache01-error.log     lab6/kern.log
lab6/apache22.log           lab6/make.log
lab6/auth.log               lab6/report.log
lab6/bootstrap.log          lab6/term.log
lab6/dpkg.log               lab6/unattended-upgrades-dpkg.log
lab6/fontconfig.log         lab6/unattended-upgrades.log
lab6/gpu-manager.log        lab6/unattended-upgrades-shutdown.log
don@dono:~$ mkdir lab6/log-files
don@dono:~$ mv lab6/*.log lab6/log-files/
don@dono:~$ ls lab6/
25Games.lst    Expenses.xls  file_02.sh  file_05.sh  log-files
apache03.err   file_00.sh    file_03.sh  last.txt    lost.txt
Document.doc   file_01.sh    file_04.sh  list.txt    trip22-info.doc
don@dono:~$ ls lab6/log-files/
88_Application-log.log  history.log
alternatives.log        http404.log
apache01-error.log      kern.log
apache22.log            make.log
auth.log                report.log
bootstrap.log           term.log
dpkg.log                unattended-upgrades-dpkg.log
fontconfig.log          unattended-upgrades.log
gpu-manager.log         unattended-upgrades-shutdown.log
don@dono:~$ _
```

Question 2 | Using the ? wildcard

```
don@dono:~$ ls lab6/.??*
lab6/.appveyor.yml      lab6/.jshintignore
lab6/.auto-changelog  lab6/.jshintrc
lab6/.bash_history      lab6/.keep
lab6/.bash_logout       lab6/.last_revision
lab6/.bashrc            lab6/.metadata-v2
lab6/.changed           lab6/.meta.isrunning
lab6/.cis106.png        lab6/.min-wd
lab6/.coveralls.yml     lab6/.npmignore
lab6/.dir-locals.el     lab6/.nycrc
lab6/.editorconfig      lab6/.padding
lab6/.envrc             lab6/.parentlock
lab6/.eslintignore      lab6/.prettierignore
lab6/.eslintrc          lab6/.prettierrc.yaml
lab6/.eslintrc.js       lab6/.profile
lab6/.eslintrc.json     lab6/.startup-incomplete
lab6/.eslintrc.yml      lab6/.sudo_as_admin_successful
lab6/.gitattributes     lab6/.tern-project
lab6/.gitconfig         lab6/.tm_properties
lab6/.gitignore         lab6/.tonic_example.js
lab6/.gitkeep           lab6/.travis.yml
lab6/.gitmodules        lab6/.vboxclient-clipboard.pid
lab6/.hidden            lab6/.vboxclient-display-svga-x11.pid
lab6/.htaccess          lab6/.vboxclient-draganddrop.pid
lab6/.istanbul.yml      lab6/.vboxclient-seamless.pid
lab6/.jscs.json         lab6/.vsixmanifest
lab6/.jscsrc
don@dono:~$ _
```

```
don@dono:~$ ls -A lab6/
25Games.lst        file_02.sh        .metadata-v2
apache03.err       file_03.sh        .meta.isrunning
.appveyor.yml      file_04.sh        .min-wd
.auto-changelog    file_05.sh        .npmignore
.bash_history      .gitattributes    .nycrc
.bash_logout       .gitconfig        .padding
.bashrc            .gitignore        .parentlock
.changed           .gitkeep          .prettierignore
.cis106.png        .gitmodules       .prettierrc.yaml
.coveralls.yml     .hidden           .profile
.dir-locals.el     .htaccess         .startup-incomplete
Document.doc       .istanbul.yml     .sudo_as_admin_successful
.editorconfig      .jscs.json        .tern-project
.envrc             .jscsrc           .tm_properties
.eslintignore      .jshintignore     .tonic_example.js
.eslintrc          .jshintrc         .travis.yml
.eslintrc.js       .keep             trip22-info.doc
.eslintrc.json     .last_revision    .vboxclient-clipboard.pid
.eslintrc.yml      last.txt          .vboxclient-display-svga-x11.pid
Expenses.xls       list.txt          .vboxclient-draganddrop.pid
```

```
file_00.sh          log-files          .vboxclient-seamless.pld
file_01.sh          lost.txt           .vsixmanifest
don@dono:~$ 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
don@dono:~$ _
```

```
don@dono:~$ 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
don@dono:~$ ls -A lab6/*.l?*.st
ls: cannot access 'lab6/*.l?*.st': No such file or directory
don@dono:~$ ls -A lab6/*.l?st
ls: cannot access 'lab6/*.l?st': No such file or directory
don@dono:~$ ls -A lab6/*.l?
ls: cannot access 'lab6/*.l?': No such file or directory
don@dono:~$ ls -A lab6/.l?*
lab6/.last_revision
don@dono:~$ .l?st*
.l?st*: command not found
don@dono:~$ ls -A lab6/.lst?
ls: cannot access 'lab6/.lst?': No such file or directory
don@dono:~$ ls -A lab6/.l?st
ls: cannot access 'lab6/.l?st': No such file or directory
don@dono:~$ ls -A lab6/.l?st*
lab6/.last_revision
don@dono:~$ _
```

```
don@dono:~$ ls -A lab6/.??_*
lab6/.tm_properties
don@dono:~$ _
```

Question 3 | Using the [] Wildcard

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

```
don@dono:~/lab6$ ls *[a-z]*[0-9]*
apache03.err  file_01.sh  file_03.sh  file_05.sh
file_00.sh    file_02.sh  file_04.sh  trip22-info.doc
don@dono:~/lab6$ _
```

Question 4 | Using brace expansion

```
don@dono:~/lab6$ mkdir -p wallpapers/cars/{1080p,2k,4k}
don@dono:~/lab6$ tree wallpapers/
wallpapers/
└── cars
    ├── 1080p                    4 / 8
    ├── 2k
    └── 4k

4 directories, 0 files
don@dono:~/lab6$ _
```

```
don@dono:~/lab6$ mkdir -p assets/{imgs,video}/{large,small}
don@dono:~/lab6$ tree assets/
assets/
├── imgs
│   ├── large
│   └── small
└── video
    ├── large
    └── small

6 directories, 0 files
don@dono:~/lab6$ _
```

```
don@dono:~/lab6$ mkdir -p docs/books/{history,math}/{fall,spring}
don@dono:~/lab6$ tree docs/
docs/
└── books
    ├── history
    │   ├── fall
    │   └── spring
    └── math
        ├── fall
        └── spring

7 directories, 0 files
don@dono:~/lab6$ touch docs/books/{history,math}/{fall,spring}/book.pdf
don@dono:~/lab6$ tree docs/
docs/
└── books
    ├── history
    │   ├── fall
    │   │   └── book.pdf
    │   └── spring
    │       └── book.pdf
    └── math
        ├── fall
        │   └── book.pdf
        └── spring
            └── book.pdf

7 directories, 4 files
don@dono:~/lab6$
```

```
don@dono:~/lab6$ mkdir -p research/{books/{math,science}/{ephub,pdf},mag
azines/{computers,running,videogames}/{fanmade,official}}/
don@dono:~/lab6$ tree research/
research/
├── books
│   ├── math
│   │   ├── ephub
│   │   └── pdf
│   └── science
│       ├── ephub
│       └── pdf
└── magazines
    ├── computers
    │   ├── fanmade
    │   └── official
    ├── running
    │   ├── fanmade
    │   └── official
    └── videogames
        ├── fanmade
        └── official

17 directories, 0 files
don@dono:~/lab6$
```

```
don@dono:~$ mkdir lab6-q5
don@dono:~$ cd /
don@dono:/$ touch ~/lab6-q5/{program.py,people.csv,data.xls}
don@dono:/$ tree ~/lab6-q5/
/home/don/lab6-q5/
├── data.xls
├── people.csv
└── program.py

0 directories, 3 files
don@dono:/$ cd usr/share/
don@dono:/usr/share$ mkdir ~/lab6-q5/movies
don@dono:/usr/share$ touch ~/lab6-q5/movies/{movies.lst,marvel.txt,disne
y.doc}
don@dono:/usr/share$ rm ~/lab6-q5/{program.py,people.csv} ~/lab6-q5/movi
es/{disney.doc,marvel.txt}
don@dono:/usr/share$ ls ~/lab6-q5/
data.xls  movies
don@dono:/usr/share$ ls ~/lab6-q5/movies/
movies.lst
don@dono:/usr/share$ _
```

Challenge Question

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

10 directories, 0 files
```

```
don@dono:~/challenge-Lab6$ mv -t audio/aac song1.aac song2.aac song3.aac
don@dono:~/challenge-Lab6$ mv -t audio/mp3 song1.mp3 song2.mp3 song3.mp3
don@dono:~/challenge-Lab6$ tree audio/
audio/
├── aac
│   ├── song1.aac
│   ├── song2.aac
│   └── song3.aac
└── mp3
    ├── song1.mp3
    ├── song2.mp3
    └── song3.mp3

2 directories, 6 files
don@dono:~/challenge-Lab6$ _
```

```
don@dono:~/challenge-Lab6$ mv -t docs/docx docs1.docx docs2.docx docs3.d
ocx
don@dono:~/challenge-Lab6$ mv -t docs/pdf docs1.pdf docs2.pdf docs3.pdf
don@dono:~/challenge-Lab6$ mv -t docs/docx docs1.doc docs2.doc docs3.doc
don@dono:~/challenge-Lab6$ tree docs/
docs/
├── docx
│   ├── docs1.doc
│   ├── docs1.docx                    7 / 8
│   ├── docs2.doc
│   ├── docs2.docx
│   ├── docs3.doc
│   └── docs3.docx
├── pdf
│   ├── docs1.pdf
│   ├── docs2.pdf
│   └── docs3.pdf
└── xls

3 directories, 9 files
don@dono:~/challenge-Lab6$ _
```

```
don@dono:~/challenge-Lab6$ mv -t images/jpg image1.jpg image2.jpg image3
.jpg
don@dono:~/challenge-Lab6$ tree images/jpg/
images/jpg/
├── image1.jpg
├── image2.jpg
└── image3.jpg

0 directories, 3 files
don@dono:~/challenge-Lab6$ _
```

```
don@dono:~/challenge-Lab6$ mv -t images/png image1.png image2.png image3
.png
don@dono:~/challenge-Lab6$ mv -t images/png image1.gif image2.gif image3
.gif
don@dono:~/challenge-Lab6$ tree images/png/
images/png/
├── image1.gif
├── image1.png
├── image2.gif
├── image2.png
├── image3.gif
└── image3.png

0 directories, 6 files
don@dono:~/challenge-Lab6$ _
```

```
don@dono:~/challenge-Lab6$ tree
.
├── audio
│   ├── aac
│   │   ├── song1.aac
│   │   ├── song2.aac
│   │   └── song3.aac
│   └── mp3
│       ├── song1.mp3
│       ├── song2.mp3
│       └── song3.mp3
├── docs
│   ├── docx
│   │   ├── docs1.doc
│   │   ├── docs1.docx
│   │   ├── docs2.doc
│   │   ├── docs2.docx
│   │   ├── docs3.doc
│   │   └── docs3.docx
│   ├── pdf
│   │   ├── docs1.pdf
│   │   ├── docs2.pdf
│   │   └── docs3.pdf
│   └── xls
├── images
│   ├── jpg
│   │   ├── image1.jpg
│   │   ├── image2.jpg
│   │   └── image3.jpg
│   └── png
│       ├── image1.gif
│       ├── image1.png
│       ├── image2.gif
│       ├── image2.png
│       ├── image3.gif
│       └── image3.png
├── programs.go
├── programs.py
├── programs.rb
└── programs.sh

10 directories, 28 files
don@dono:~/challenge-Lab6$ _
```