

Completed Lab 6

Question 1

Practice 1

```
1/1 + ⌂ ⌂ Tiliix: roderick@RsLinux: ~  
1: roderick@RsLinux: ~  
roderick@RsLinux:~$ mkdir website  
roderick@RsLinux:~$ cd website  
roderick@RsLinux:~/website$ mkdir script assets  
roderick@RsLinux:~/website$ touch index.html  
roderick@RsLinux:~/website$ cd assets  
roderick@RsLinux:~/website/assets$ cd  
roderick@RsLinux:~$ cd website/assets  
roderick@RsLinux:~/website/assets$ touch image.png  
roderick@RsLinux:~/website/assets$ cd website/script  
bash: cd: website/script: No such file or directory  
roderick@RsLinux:~/website/assets$ ../  
bash: ../: Is a directory  
roderick@RsLinux:~/website/assets$ cd ../  
roderick@RsLinux:~/website$ cd script/  
roderick@RsLinux:~/website/script$ touch script.js  
roderick@RsLinux:~/website/script$ cd ../  
roderick@RsLinux:~/website$ tree  
. └── assets  
    └── image.png  
── index.html  
── script  
    └── script.js  
  
3 directories, 3 files  
roderick@RsLinux:~/website$ rm script.js image.png  
rm: cannot remove 'script.js': No such file or directory  
rm: cannot remove 'image.png': No such file or directory  
roderick@RsLinux:~/website$ cd assets/
```

```
1/1 + ⌂ ⌂ Tiliix: roderick@RsLinux: ~  
1: roderick@RsLinux: ~  
roderick@RsLinux:~/website/script$ cd ../  
roderick@RsLinux:~/website$ tree  
. └── assets  
    └── image.png  
── index.html  
── script  
    └── script.js  
  
3 directories, 3 files  
roderick@RsLinux:~/website$ rm script.js image.png  
rm: cannot remove 'script.js': No such file or directory  
rm: cannot remove 'image.png': No such file or directory  
roderick@RsLinux:~/website$ cd assets/  
roderick@RsLinux:~/website/assets$ rm image.png  
roderick@RsLinux:~/website/assets$ cd ../  
roderick@RsLinux:~/website$ cd script/  
roderick@RsLinux:~/website/script$ rm script.js  
roderick@RsLinux:~/website/script$ cd ../  
roderick@RsLinux:~/website$ rm assets/ script/  
rm: cannot remove 'assets/': Is a directory  
rm: cannot remove 'script/': Is a directory  
roderick@RsLinux:~/website$ rmdir assets/ script  
roderick@RsLinux:~/website$ cd  
roderick@RsLinux:~$ rmdir website/  
rmdir: failed to remove 'website/': Directory not empty  
roderick@RsLinux:~$ rm -r website/  
roderick@RsLinux:~$ |
```

Practice 2

Tilix: roderick@RsLinux: /usr/share

```

1: roderick@RsLinux: ~
roderick@RsLinux:~$ cd /usr/share
roderick@RsLinux:/usr/share$ mkdir ~website
roderick@RsLinux:/usr/share$ mkdir -p ~/website/assets/images/small
roderick@RsLinux:/usr/share$ touch ~/website/assets/images/small/logo.png
roderick@RsLinux:/usr/share$ ~/website/assets/images/small/logo.png
bash: /home/roderick/website/assets/images/small/logo.png: Permission denied
roderick@RsLinux:/usr/share$ rm ~/website/assets/images/small/logo.png
roderick@RsLinux:/usr/share$ rm -r ~/website
roderick@RsLinux:/usr/share$ |

```

2: roderick@RsLinux: ~

Create the DIRECTORY(ies), if they do not already exist.

Mandatory arguments to long options are mandatory for short options too.

- m, --mode=MODE set file mode (as in chmod), not a=rwx - umask
- p, --parents no error if existing, make parent directories as needed, with their file modes unaffected by any -m option
- v, --verbose print a message for each created directory
- Z set SELinux security context of each created directory to the default type
- context[=CTX] like -Z, or if CTX is specified then set the SELinux or SMACK security context to CTX

Practice3

Applications

Nov 9 2:22 PM

1/1 Tilix: roderick@RsLinux: ~

```

1: roderick@RsLinux: ~
roderick@RsLinux:~$ mkdir -p website/assets
roderick@RsLinux:~$ curl https://cis106.com/assets/samplesite.txt -o ~/website/index.html
          % Total    % Received % Xferd  Average Speed   Time   Time     Time  Current
             0      0      0      0      0      0      0      0      0      0
  100  455  100  455    0      0  3135      0  --:--:--  --:--:--  --:--:--  3137
roderick@RsLinux:~$ mv Downloads/pexels-
mv: missing destination file operand after 'Downloads/pexels-'
Try 'mv --help' for more information.
roderick@RsLinux:~$ mv Downloads/pexels-alexandre-moreira-2527876-33392190.jpg
ebsite/assets
roderick@RsLinux:~$ mv Downloads/pexels-nadine-hirschmugl-2157031373-34504394.
g website/assets
roderick@RsLinux:~$ mv website/assets/pexels-nadine-hirschmugl-2157031373-3450
94.jpg website/assets/image.png
roderick@RsLinux:~$ mv website/assets/pexels-alexandre-moreira-2527876-3339219
jpg website/assets/image2.png
roderick@RsLinux:~$ |

```

Sample site

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Challenge Question 1

1: roderick@RsLinux:~/lab6-challenge1\$ cd lab6-challenge1/
roderick@RsLinux:~/lab6-challenge1\$ les
bash: les: command not found
roderick@RsLinux:~/lab6-challenge1\$ ls
challenge.py notes.doc
debian.png program.py
earth.mp4 script.sh
garbage.txt song1.mp3
hello.sh song2.mp3
instructions.docx submission.pdf
lain.mp4 to-be-deleted.txt
no-longer-needed.txt tux.png
roderick@RsLinux:~/lab6-challenge1\$ ls -a
. instructions.docx .secrets.txt
.. .key song1.mp3
challenge.py lain.mp4 song2.mp3
debian.png no-longer-needed.txt submission.pdf
earth.mp4 notes.doc to-be-deleted.txt
garbage.txt .password tux.png
.git program.py
hello.sh script.sh
roderick@RsLinux:~/lab6-challenge1\$ rm no-longer-needed.txt
to-be-deleted.txt
roderick@RsLinux:~/lab6-challenge1\$ |

2: roderick@RsLinux:~/lab6-challenge1\$ tree
.
├── challenge.py
├── debian.png
├── earth.mp4
├── garbage.txt
├── hello.sh
├── instructions.docx
├── lain.mp4
├── no-longer-needed.txt
├── notes.doc
├── program.py
├── script.sh
├── song1.mp3
├── song2.mp3
└── submission.pdf
 └── to-be-deleted.txt
 └── tux.png

1 directory, 16 files
roderick@RsLinux:~/lab6-challenge1\$ |

Applications Nov 9 5:20 PM

1: roderick@RsLinux:~/lab6-challenge1\$ such file or directory
roderick@RsLinux:~/lab6-challenge1\$ cd
roderick@RsLinux:~\$ mkdir lab6-challenge1/assets
bash: mkdir: command not found
roderick@RsLinux:~\$ mkdir lab6-challenge1/assets
roderick@RsLinux:~\$ cd lab6-challenge1/
roderick@RsLinux:~/lab6-challenge1\$ mkdir assets/audio assets/imgs assets/video
roderick@RsLinux:~/lab6-challenge1\$ mkdir code documents
roderick@RsLinux:~/lab6-challenge1\$ mv song song1.mp3 song2.mp3
roderick@RsLinux:~/lab6-challenge1\$ mv song song1.mp3 song2.mp3
roderick@RsLinux:~/lab6-challenge1\$ mv song1.mp3 song2.mp3 assets/audio
roderick@RsLinux:~/lab6-challenge1\$ mv debian.png tux.png assets/imgs
roderick@RsLinux:~/lab6-challenge1\$ mv earth.mp4 lain.mp4 assets/video
roderick@RsLinux:~/lab6-challenge1\$ mkdir code/bash
roderick@RsLinux:~/lab6-challenge1\$ mkdir code/.hidden code/python
roderick@RsLinux:~/lab6-challenge1\$ mkdir code/bash/example
roderick@RsLinux:~/lab6-challenge1\$ mkdir code/python/documents
roderick@RsLinux:~/lab6-challenge1\$ mkdir code/python/hmw

2: roderick@RsLinux:~/lab6-challenge1\$ bash: tree-a: command not found
roderick@RsLinux:~/lab6-challenge1\$ tree
.
├── assets
│ ├── audio
│ │ ├── song1.mp3
│ │ └── song2.mp3
│ ├── imgs
│ │ ├── debian.png
│ │ └── tux.png
│ └── video
│ ├── earth.mp4
│ └── lain.mp4
├── challenge.py
└── code
 ├── bash
 │ └── example
 ├── python
 │ └── documents
 └── hmw
 ├── documents
 ├── garbage.txt
 ├── hello.sh
 ├── instructions.docx
 ├── notes.doc
 ├── program.py
 ├── script.sh
 └── submission.pdf

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1: roderick@RsLinux:~/lab6-challenge1 ~

```
assets/audio
roderick@RsLinux:~/lab6-challenge1$ mv debian.png tux.png
assets/imgs
roderick@RsLinux:~/lab6-challenge1$ mv earth.mp4 lain.mp4
assets/video
roderick@RsLinux:~/lab6-challenge1$ mkdir code/bash
roderick@RsLinux:~/lab6-challenge1$ mkdir code/.hidden code/python
roderick@RsLinux:~/lab6-challenge1$ mkdir code/bash/example
roderick@RsLinux:~/lab6-challenge1$ mkdir code/python/documents
roderick@RsLinux:~/lab6-challenge1$ mkdir code/python/hmw
roderick@RsLinux:~/lab6-challenge1$ mv code/bash/example hello.sh script.sh
mv: target 'script.sh': Not a directory
roderick@RsLinux:~/lab6-challenge1$ mv code/bash/example hello.sh
mv: cannot overwrite non-directory 'hello.sh' with directory 'code/bash/example'
roderick@RsLinux:~/lab6-challenge1$ cd code/bash
bash: cd: too many arguments
roderick@RsLinux:~/lab6-challenge1$ cd code/bash
roderick@RsLinux:~/lab6-challenge1/code/bash$ cd ../
roderick@RsLinux:~/lab6-challenge1/code$ cd ../
roderick@RsLinux:~/lab6-challenge1$ mv hello.sh script.sh
code/bash/example
roderick@RsLinux:~/lab6-challenge1$ |
```

2: roderick@RsLinux:~/lab6-challenge1 ~

```
assets
  audio
    - song1.mp3
    - song2.mp3
  imgs
    - debian.png
    - tux.png
  video
    - earth.mp4
    - lain.mp4
challenge.py
code
  bash
    example
      - hello.sh
      - script.sh
  python
    documents
      - hmw
    documents
      - garbage.txt
      - instructions.docx
      - notes.doc
      - program.py
      - submission.pdf
12 directories, 14 files
roderick@RsLinux:~/lab6-challenge1$ |
```

Nov 9 5:23 PM

1: roderick@RsLinux:~/lab6-challenge1 ~

```
assets/video
roderick@RsLinux:~/lab6-challenge1$ mkdir code/bash
roderick@RsLinux:~/lab6-challenge1$ mkdir code/.hidden code/python
roderick@RsLinux:~/lab6-challenge1$ mkdir code/bash/example
roderick@RsLinux:~/lab6-challenge1$ mkdir code/python/documents
roderick@RsLinux:~/lab6-challenge1$ mkdir code/python/hmw
roderick@RsLinux:~/lab6-challenge1$ mv code/bash/example hello.sh script.sh
mv: target 'script.sh': Not a directory
roderick@RsLinux:~/lab6-challenge1$ mv code/bash/example hello.sh
mv: cannot overwrite non-directory 'hello.sh' with directory 'code/bash/example'
roderick@RsLinux:~/lab6-challenge1$ cd code/bash
bash: cd: too many arguments
roderick@RsLinux:~/lab6-challenge1$ cd code/bash
roderick@RsLinux:~/lab6-challenge1/code/bash$ cd ../
roderick@RsLinux:~/lab6-challenge1/code$ cd ../
roderick@RsLinux:~/lab6-challenge1$ mv hello.sh script.sh
code/bash/example
roderick@RsLinux:~/lab6-challenge1$ mv instructions.docx notes.doc submission.pdf code/python/documents
roderick@RsLinux:~/lab6-challenge1$ mv program.py challenge.py code/python/hmw/
roderick@RsLinux:~/lab6-challenge1$ |
```

2: roderick@RsLinux:~/lab6-challenge1 ~

```
assets
  audio
    - song1.mp3
    - song2.mp3
  imgs
    - debian.png
    - tux.png
  video
    - earth.mp4
    - lain.mp4
code
  bash
    example
      - hello.sh
      - script.sh
  python
    documents
      - hmw
      - instructions.docx
      - notes.doc
      - submission.pdf
    documents
      - garbage.txt
  documents
    - challenge.py
    - program.py
12 directories, 14 files
roderick@RsLinux:~/lab6-challenge1$ |
```

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Terminal session 1 (Left):

```
1: roderick@RsLinux:~/lab6-challenge1 ~
otes.doc submission.pdf code/python/documents
roderick@RsLinux:~/lab6-challenge1$ mv program.py challenge.py
e.py code/python/hmw/
roderick@RsLinux:~/lab6-challenge1$ rm garbage.txt
roderick@RsLinux:~/lab6-challenge1$ cp code/python/documents/* ~/documents
cp: target '/home/roderick/documents': No such file or directory
roderick@RsLinux:~/lab6-challenge1$ cp code/python/documents/*
roderick@RsLinux:~/lab6-challenge1$ touch this-file-is-empty.txt assets/
roderick@RsLinux:~/lab6-challenge1$ mv this-file-is-empty.txt assets/
roderick@RsLinux:~/lab6-challenge1$ mv .key/.password/.secrets.txt code/.hidden
mv: cannot stat '.key/': Not a directory
mv: cannot stat '.password/': Not a directory
roderick@RsLinux:~/lab6-challenge1$ mv .key .password code/.hidden
mv: target '.hidden': No such file or directory
roderick@RsLinux:~/lab6-challenge1$ mv .key .password code/.hidden
roderick@RsLinux:~/lab6-challenge1$ sudo rm .git
[sudo] password for roderick:
rm: cannot remove '.git': Is a directory
roderick@RsLinux:~/lab6-challenge1$ sudo rm -r .git
roderick@RsLinux:~/lab6-challenge1$ |
```

Terminal session 2 (Right):

```
2: roderick@RsLinux:~/lab6-challenge1 ~
   this-file-is-empty.txt
   video
     earth.mp4
     lain.mp4
   code
   bash
     example
       hello.sh
       script.sh
   .hidden
     .key
     .password
     .secrets.txt
   python
     documents
       instructions.docx
       notes.doc
       submission.pdf
     hmw
       challenge.py
       program.py
   documents
     instructions.docx
     notes.doc
     submission.pdf
13 directories, 20 files
roderick@RsLinux:~/lab6-challenge1$ |
```

Terminal session 1 (Left):

```
1: roderick@RsLinux:~/lab6-challenge1 ~
roderick@RsLinux:~/lab6-challenge1$ tree -a
.
├── assets
│   ├── audio
│   │   ├── song1.mp3
│   │   └── song2.mp3
│   ├── imgs
│   │   ├── debian.png
│   │   └── tux.png
│   └── this-file-is-empty.txt
└── code
    ├── bash
    │   └── example
    │       ├── hello.sh
    │       └── script.sh
    ├── .hidden
    │   ├── .key
    │   ├── .password
    │   └── .secrets.txt
    └── python
        ├── documents
        │   ├── instructions.docx
        │   ├── notes.doc
        │   └── submission.pdf
        └── hmw
            └── challenge.py
```

The terminal window displays a file tree structure under the directory `~/lab6-challenge1`. The tree includes:

- `this-file-is-empty.txt`
- `video` (directory)
 - `earth.mp4`
 - `lain.mp4`
- `code` (directory)
 - `bash` (directory)
 - `example` (directory)
 - `hello.sh`
 - `script.sh`
 - `.hidden` (directory)
 - `.key`
 - `.password`
 - `.secrets.txt`
 - `python` (directory)
 - `documents` (directory)
 - `instructions.docx`
 - `notes.doc`
 - `submission.pdf`
 - `hw` (directory)
 - `challenge.py`
 - `program.py`
 - `documents` (directory)
 - `instructions.docx`
 - `notes.doc`
 - `submission.pdf`

13 directories, 20 files

```
roderick@RsLinux:~/lab6-challenge1$ |
```

Challenge Question 2

```
1/1 ▾ + ⌂ ⌂ Tilix: roderick@RsLinux: ~/lab6-challenge2 Q ⌂ ⌂ x  
1: roderick@RsLinux: ~/lab6-challenge2 ▾  
'In-class practice'  Public      website  
lab5files           scripts     WindBreathing  
lab5files.zip       snap        StoneBreathing  
roderick@RsLinux:~$ cd lab6-challenge2/  
roderick@RsLinux:~/lab6-challenge2$ ls  
index.html  
roderick@RsLinux:~/lab6-challenge2$ cd  
roderick@RsLinux:~/lab6-challenge2$ mv Downloads/pexels-alexander-kagan-2154133501-34491460.jpg  
lab6-challenge2/img1.jpg  
roderick@RsLinux:~/lab6-challenge2$ mv Downloads/pexels-gede-bayu-pratiwihaarja-432238721-3458776  
2.jpg lab6-challenge2/img2.jpg  
roderick@RsLinux:~/lab6-challenge2$ mv Downloads/pexels-lina-kucher-1170498288-34471640.jpg lab6  
-challenge2/img3.jpg  
roderick@RsLinux:~/lab6-challenge2$ cd lab6-challenge2  
roderick@RsLinux:~/lab6-challenge2$ ls  
img1.jpg img2.jpg img3.jpg index.html  
roderick@RsLinux:~/lab6-challenge2$ ls -lX  
total 11892  
-rw-rw-r-- 1 roderick roderick 2918 Nov  9 17:43 index.html  
-rw-rw-r-- 1 roderick roderick 6394100 Nov  9 17:46 img1.jpg  
-rw-rw-r-- 1 roderick roderick 3498145 Nov  9 17:47 img2.jpg  
-rw-rw-r-- 1 roderick roderick 2270822 Nov  9 17:47 img3.jpg  
roderick@RsLinux:~/lab6-challenge2$ |
```



