

Lab 4.1 | Managing files and directories | Answers

Assignment description [here](#)

Question 1

```
student@cis106vm: ~/lab4
student@cis106vm:~$ cd
student@cis106vm:~$ mkdir lab4
student@cis106vm:~$ cd lab4/
student@cis106vm:~/lab4$ mkdir pets docs songs
student@cis106vm:~/lab4$ mkdir pets/new pets/old docs/new docs/old songs/new songs/old
student@cis106vm:~/lab4$ touch pets/new/file1 pets/new/file2 pets/new/file3
student@cis106vm:~/lab4$ touch pets/old/file1 pets/old/file2 pets/old/file3
student@cis106vm:~/lab4$ touch docs/new/file1 docs/new/file2 docs/new/file3
student@cis106vm:~/lab4$ touch docs/old/file1 docs/old/file2 docs/old/file3
student@cis106vm:~/lab4$ touch songs/new/file1 songs/new/file2 songs/new/file3
student@cis106vm:~/lab4$ touch songs/old/file1 songs/old/file2 songs/old/file3
student@cis106vm:~/lab4$
```

```
student@cis106vm: ~/lab4
student@cis106vm:~/lab4$ touch pets/new/file1 pets/new/file2 pets/new/file3
student@cis106vm:~/lab4$ touch pets/old/file1 pets/old/file2 pets/old/file3
student@cis106vm:~/lab4$ touch docs/new/file1 docs/new/file2 docs/new/file3
student@cis106vm:~/lab4$ touch docs/old/file1 docs/old/file2 docs/old/file3
student@cis106vm:~/lab4$ touch songs/new/file1 songs/new/file2 songs/new/file3
student@cis106vm:~/lab4$ touch songs/old/file1 songs/old/file2 songs/old/file3
student@cis106vm:~/lab4$ ls -R
.:
docs  pets  songs

./docs:
new  old

./docs/new:
file1 file2 file3

./docs/old:
file1 file2 file3

./pets:
new  old

./pets/new:
file1 file2 file3

./pets/old:
file1 file2 file3

./songs:
new  old

./songs/new:
file1 file2 file3

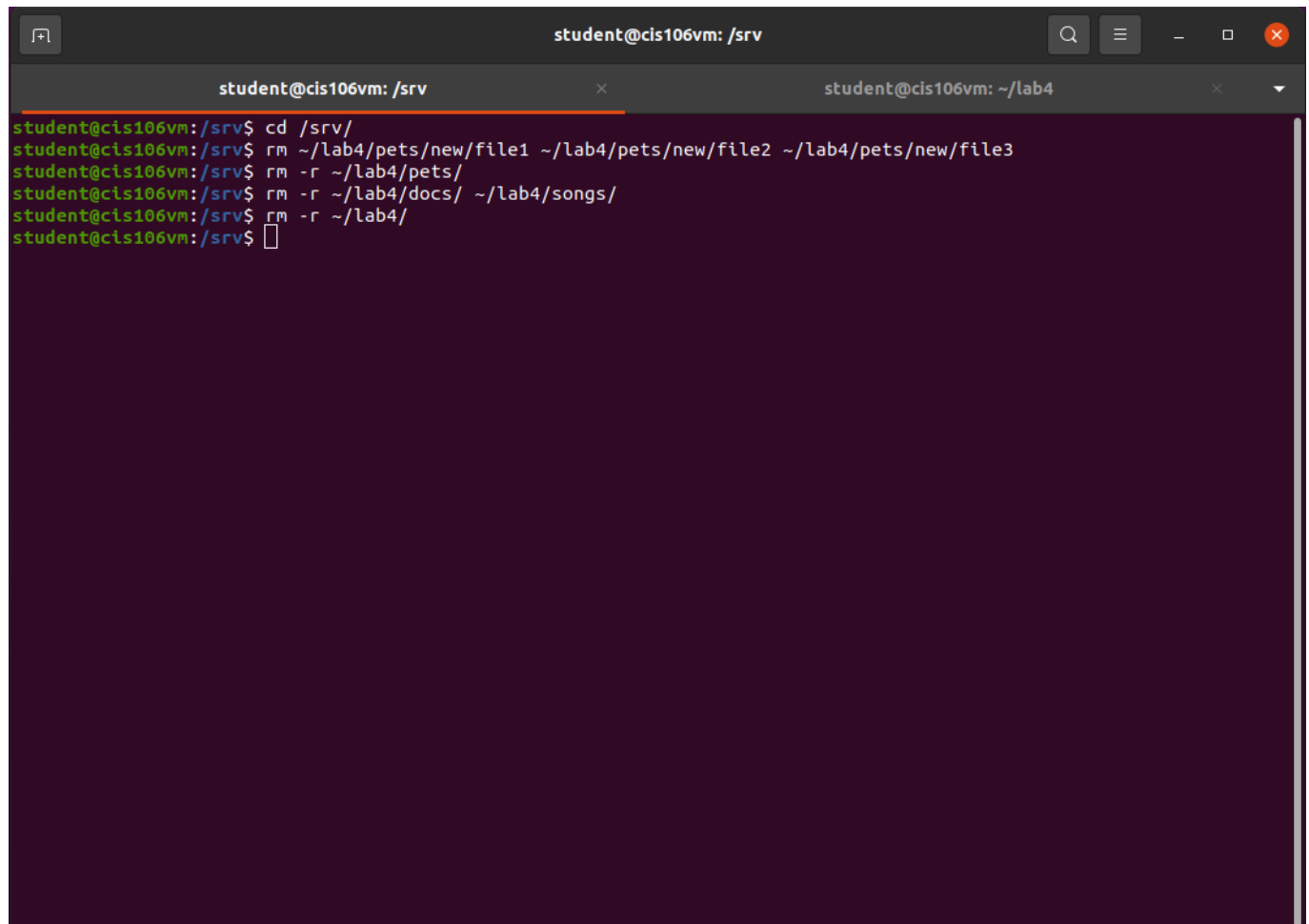
./songs/old:
file1 file2 file3
student@cis106vm:~/lab4$
```

```
student@cis106vm: ~/lab4
student@cis106vm: ~/lab4
./songs/new:
file1 file2 file3

./songs/old:
file1 file2 file3
student@cis106vm:~/lab4$ tree ~/lab4
/home/student/lab4
├── docs
│   ├── new
│   │   ├── file1
│   │   ├── file2
│   │   └── file3
│   └── old
│       ├── file1
│       ├── file2
│       └── file3
├── pets
│   ├── new
│   │   ├── file1
│   │   ├── file2
│   │   └── file3
│   └── old
│       ├── file1
│       ├── file2
│       └── file3
└── songs
    ├── new
    │   ├── file1
    │   ├── file2
    │   └── file3
    └── old
        ├── file1
        ├── file2
        └── file3

9 directories, 18 files
student@cis106vm:~/lab4$
```

Question 2

A terminal window with a dark background and light green text. The window title is 'student@cis106vm: /srv'. The terminal shows a series of commands and their outputs. The first command is 'cd /srv/'. The second command is 'rm ~/lab4/pets/new/file1 ~/lab4/pets/new/file2 ~/lab4/pets/new/file3'. The third command is 'rm -r ~/lab4/pets/'. The fourth command is 'rm -r ~/lab4/docs/ ~/lab4/songs/'. The fifth command is 'rm -r ~/lab4/'. The prompt is now 'student@cis106vm: /srv\$'.

```
student@cis106vm: /srv$ cd /srv/
student@cis106vm: /srv$ rm ~/lab4/pets/new/file1 ~/lab4/pets/new/file2 ~/lab4/pets/new/file3
student@cis106vm: /srv$ rm -r ~/lab4/pets/
student@cis106vm: /srv$ rm -r ~/lab4/docs/ ~/lab4/songs/
student@cis106vm: /srv$ rm -r ~/lab4/
student@cis106vm: /srv$
```

Question 3

```

student@cis106vm: ~
student@cis106vm: ~
student@cis106vm: ~$ cd
student@cis106vm:~$ wget https://robertalberto.com/public/lab4.zip && unzip lab4.zip && rm lab4.zip
--2021-10-20 14:29:50-- https://robertalberto.com/public/lab4.zip
Resolving robertalberto.com (robertalberto.com)... 34.66.0.162
Connecting to robertalberto.com (robertalberto.com)|34.66.0.162|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4209377 (4.0M) [application/zip]
Saving to: 'lab4.zip'

lab4.zip                               100%[=====] 4.01M 5.25MB/s in 0.8s

2021-10-20 14:29:51 (5.25 MB/s) - 'lab4.zip' saved [4209377/4209377]

Archive: lab4.zip
  creating: lab4/
 extracting: lab4/.hidden
  inflating: lab4/Pexels.mp4
  inflating: lab4/Silence.mp3
  inflating: lab4/Videoleaf.mp4
  inflating: lab4/another.mp4
  inflating: lab4/audio.mp3
 extracting: lab4/fileA.txt
 extracting: lab4/fileB.txt
 extracting: lab4/filea.txt
 extracting: lab4/image1.jpeg
 extracting: lab4/image2.jpeg
 extracting: lab4/image3.png
 extracting: lab4/image4.png
 extracting: lab4/image5.gif
  inflating: lab4/song.mp3
  inflating: lab4/trivia.txt
 extracting: lab4/triviaXYZ.txt
 extracting: lab4/vita.txt
  creating: lab4/wallpaperslab4/
  inflating: lab4/wallpaperslab4/cpu.jpeg
  inflating: lab4/wallpaperslab4/keyboard.jpeg
  inflating: lab4/wallpaperslab4/pc.jpeg
student@cis106vm:~$

```

```

student@cis106vm: ~
student@cis106vm: ~
student@cis106vm: ~$ cd
student@cis106vm:~$ wget https://robertalberto.com/public/lab4.zip && unzip lab4.zip && rm lab4.zip
--2021-10-20 14:29:50-- https://robertalberto.com/public/lab4.zip
Resolving robertalberto.com (robertalberto.com)... 34.66.0.162
Connecting to robertalberto.com (robertalberto.com)|34.66.0.162|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4209377 (4.0M) [application/zip]
Saving to: 'lab4.zip'

lab4.zip                               100%[=====] 4.01M 5.25MB/s in 0.8s

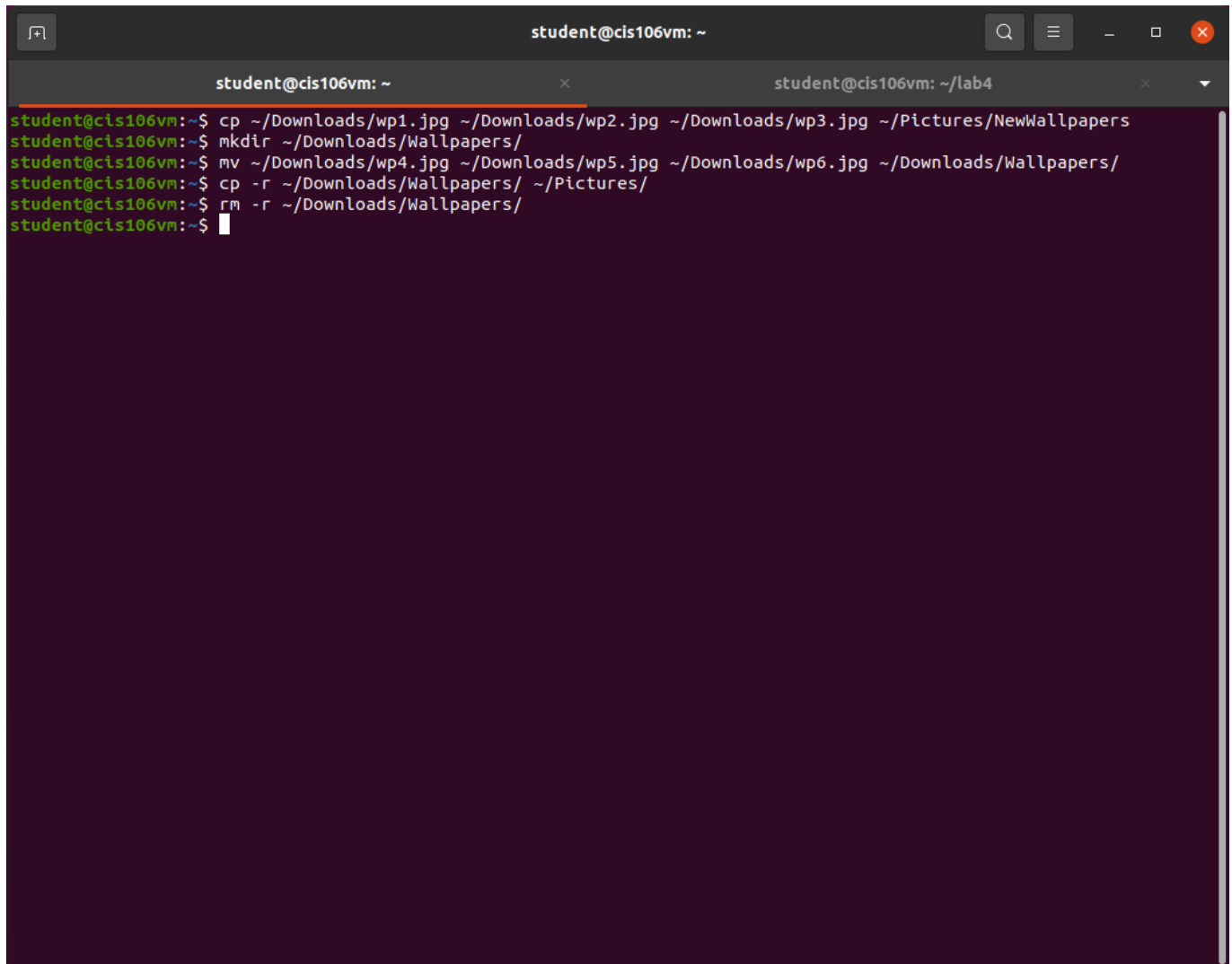
2021-10-20 14:29:51 (5.25 MB/s) - 'lab4.zip' saved [4209377/4209377]

Archive: lab4.zip
  creating: lab4/
 extracting: lab4/.hidden
  inflating: lab4/Pexels.mp4
  inflating: lab4/Silence.mp3
  inflating: lab4/Videoleaf.mp4
  inflating: lab4/another.mp4
  inflating: lab4/audio.mp3
 extracting: lab4/fileA.txt
 extracting: lab4/fileB.txt
 extracting: lab4/filea.txt
 extracting: lab4/image1.jpeg
 extracting: lab4/image2.jpeg
 extracting: lab4/image3.png
 extracting: lab4/image4.png
 extracting: lab4/image5.gif
  inflating: lab4/song.mp3
  inflating: lab4/trivia.txt
 extracting: lab4/triviaXYZ.txt
 extracting: lab4/vita.txt
  creating: lab4/wallpaperslab4/
  inflating: lab4/wallpaperslab4/cpu.jpeg
  inflating: lab4/wallpaperslab4/keyboard.jpeg
  inflating: lab4/wallpaperslab4/pc.jpeg

```

```
ch editing: lab4/wallpapers/lab4/pc.jpeg  
student@cis106vm:~$
```

Question 4



```
student@cis106vm: ~  
student@cis106vm: ~$ cp ~/Downloads/wp1.jpg ~/Downloads/wp2.jpg ~/Downloads/wp3.jpg ~/Pictures/NewWallpapers  
student@cis106vm:~$ mkdir ~/Downloads/Wallpapers/  
student@cis106vm:~$ mv ~/Downloads/wp4.jpg ~/Downloads/wp5.jpg ~/Downloads/wp6.jpg ~/Downloads/Wallpapers/  
student@cis106vm:~$ cp -r ~/Downloads/Wallpapers/ ~/Pictures/  
student@cis106vm:~$ rm -r ~/Downloads/Wallpapers/  
student@cis106vm:~$
```

Lab 4.2 | File Globing/wildcards | Answers

Assignment description [here](#)

Question 1

```
student@cis106vm: ~/lab4/question1
student@cis106vm:~/lab4/question1$ cd ~/lab4/question1
student@cis106vm:~/lab4/question1$ ls *txt
books.txt  bots.txt  creation.txt  linux.txt  rook.rock.txt
student@cis106vm:~/lab4/question1$ ls b*.txt
books.txt  bots.txt
student@cis106vm:~/lab4/question1$ ls *.txt *.html
about-page.html  books.txt  bots.txt  creation.txt  home_page.html  html_page.html  linux.txt  rook.rock.txt
student@cis106vm:~/lab4/question1$ ls -lh *page*
-rw-rw-r-- 1 student student 7.4K Oct 20 15:13 about-page.html
-rw-rw-r-- 1 student student 12K Oct 20 15:13 home_page.html
-rw-rw-r-- 1 student student 7.8K Oct 20 15:13 html_page.html
-rw-rw-r-- 1 student student 22 Oct 20 15:13 page.css
-rw-rw-r-- 1 student student 870 Oct 20 15:13 pageload.js
student@cis106vm:~/lab4/question1$ mkdir ~/lab4/question1/html ~/lab4/question1/txt ~/lab4/question1/css ~/lab4/question1/js
student@cis106vm:~/lab4/question1$ mv *.html ~/lab4/question1/html
student@cis106vm:~/lab4/question1$ mv *.txt ~/lab4/question1/txt
student@cis106vm:~/lab4/question1$ mv *.css ~/lab4/question1/css
student@cis106vm:~/lab4/question1$ mv *.js ~/lab4/question1/js
student@cis106vm:~/lab4/question1$
```

Question 2

```
student@cis106vm: ~/lab4/question2
student@cis106vm:~/lab4/question2$ cd ~/lab4/question2
student@cis106vm:~/lab4/question2$ mv b?d.xml xmlfiles/
student@cis106vm:~/lab4/question2$ ls .??*
.hiddenfileA.log  .hiddenfileB.log  .hiddenfileC.log  .hiddenfileD.log
student@cis106vm:~/lab4/question2$ ls *.????
feat.json  feat.json  foot.json
student@cis106vm:~/lab4/question2$ ls f??t.*
feat.json  feat.json  foot.json
student@cis106vm:~/lab4/question2$
```

Question 3

```
student@cis106vm: ~/lab4/question3
student@cis106vm:~/lab4/question3$ cd ~/lab4/question3
student@cis106vm:~/lab4/question3$ ls .??[a-z]*
.Anotherapp.py  .app.py  .main.py
student@cis106vm:~/lab4/question3$ ls [A-Z][a-z]*[0-9].*
Main1.py
student@cis106vm:~/lab4/question3$ ls [a-de-k]*.**
drill.py  kcc.rb
student@cis106vm:~/lab4/question3$ ls [a-z]*[!0-9].*
drill.py  kcc.rb
student@cis106vm:~/lab4/question3$
```

Question 4

```
student@cis106vm: ~/lab4/question4
student@cis106vm:~/lab4/question4$ mkdir -p wallpapers/{cars,ocean}/{1080p,2k,4k}
student@cis106vm:~/lab4/question4$
```

```
student@cis106vm:~/lab4/question4$ mkdir -p assets/{imgs,video}/{large,small}/source
student@cis106vm:~/lab4/question4$ tree
.
├── assets
│   ├── imgs
│   │   ├── large
│   │   │   └── source
│   │   └── small
│   │       └── source
│   └── video
│       ├── large
│       │   └── source
│       └── small
│           └── source
└── wallpapers
    ├── cars
    │   ├── 1080p
    │   ├── 2k
    │   └── 4k
    └── ocean
        ├── 1080p
        ├── 2k
        └── 4k

20 directories, 0 files
student@cis106vm:~/lab4/question4$
```

```
student@cis106vm:~/lab4/question4$ mkdir -p docs/{book,research}/{history,math,science,social}
student@cis106vm:~/lab4/question4$ tree
.
├── assets
│   ├── imgs
│   │   ├── large
│   │   │   └── source
│   │   └── small
│   │       └── source
│   └── video
│       ├── large
│       │   └── source
│       └── small
│           └── source
├── docs
│   ├── book
│   │   ├── history
│   │   ├── math
│   │   ├── science
│   │   └── social
│   └── research
│       ├── history
│       ├── math
│       ├── science
│       └── social
└── wallpapers
    ├── cars
    │   ├── 1080p
    │   ├── 2k
    │   └── 4k
    └── ocean
        ├── 1080p
        ├── 2k
        └── 4k

31 directories, 0 files
student@cis106vm:~/lab4/question4$
```



```
student@cis106vm: ~/lab4/question4
student@cis106vm:~/lab4/question4$ mkdir -p Research/{books/{math,science}/{epub,pdf},magazines/{computers,running,videogames}/{fanmade,official}}
student@cis106vm:~/lab4/question4$ tree Research/
Research/
├── books
│   ├── math
│   │   ├── epub
│   │   └── pdf
│   └── science
│       ├── epub
│       └── pdf
└── magazines
    ├── computers
    │   ├── fanmade
    │   └── official
    ├── running
    │   ├── fanmade
    │   └── official
    └── videogames
        ├── fanmade
        └── official

17 directories, 0 files
student@cis106vm:~/lab4/question4$
```

```
student@cis106vm: ~/lab4/question4
student@cis106vm:~/lab4/question4$ mkdir -p backup/{files/{personal,programs,school}/{feb,jan,marc},images/{cars,classic,panorama,world/{high,low}},random}
student@cis106vm:~/lab4/question4$ tree backup/
backup/
├── files
│   ├── personal
│   │   ├── feb
│   │   ├── jan
│   │   └── marc
│   ├── programs
│   │   ├── feb
│   │   ├── jan
│   │   └── marc
│   └── school
│       ├── feb
│       ├── jan
│       └── marc
├── images
│   ├── cars
│   ├── classic
│   ├── panorama
│   └── world
│       ├── high
│       └── low
└── random

21 directories, 0 files
student@cis106vm:~/lab4/question4$
```

Lab 4.1 | Managing files and directories | Answers

Assignment description [here](#)

Question 1

```
student@cis106vm: ~/lab4
student@cis106vm:~$ cd
student@cis106vm:~$ mkdir lab4
student@cis106vm:~$ cd lab4/
student@cis106vm:~/lab4$ mkdir pets docs songs
student@cis106vm:~/lab4$ mkdir pets/new pets/old docs/new docs/old songs/new songs/old
student@cis106vm:~/lab4$ touch pets/new/file1 pets/new/file2 pets/new/file3
student@cis106vm:~/lab4$ touch pets/old/file1 pets/old/file2 pets/old/file3
student@cis106vm:~/lab4$ touch docs/new/file1 docs/new/file2 docs/new/file3
student@cis106vm:~/lab4$ touch docs/old/file1 docs/old/file2 docs/old/file3
student@cis106vm:~/lab4$ touch songs/new/file1 songs/new/file2 songs/new/file3
student@cis106vm:~/lab4$ touch songs/old/file1 songs/old/file2 songs/old/file3
student@cis106vm:~/lab4$
```

```
student@cis106vm: ~/lab4
student@cis106vm:~/lab4$ touch pets/new/file1 pets/new/file2 pets/new/file3
student@cis106vm:~/lab4$ touch pets/old/file1 pets/old/file2 pets/old/file3
student@cis106vm:~/lab4$ touch docs/new/file1 docs/new/file2 docs/new/file3
student@cis106vm:~/lab4$ touch docs/old/file1 docs/old/file2 docs/old/file3
student@cis106vm:~/lab4$ touch songs/new/file1 songs/new/file2 songs/new/file3
student@cis106vm:~/lab4$ touch songs/old/file1 songs/old/file2 songs/old/file3
student@cis106vm:~/lab4$ ls -R
.:
docs  pets  songs

./docs:
new  old

./docs/new:
file1  file2  file3

./docs/old:
file1  file2  file3

./pets:
new  old

./pets/new:
file1  file2  file3

./pets/old:
file1  file2  file3

./songs:
new  old

./songs/new:
file1  file2  file3

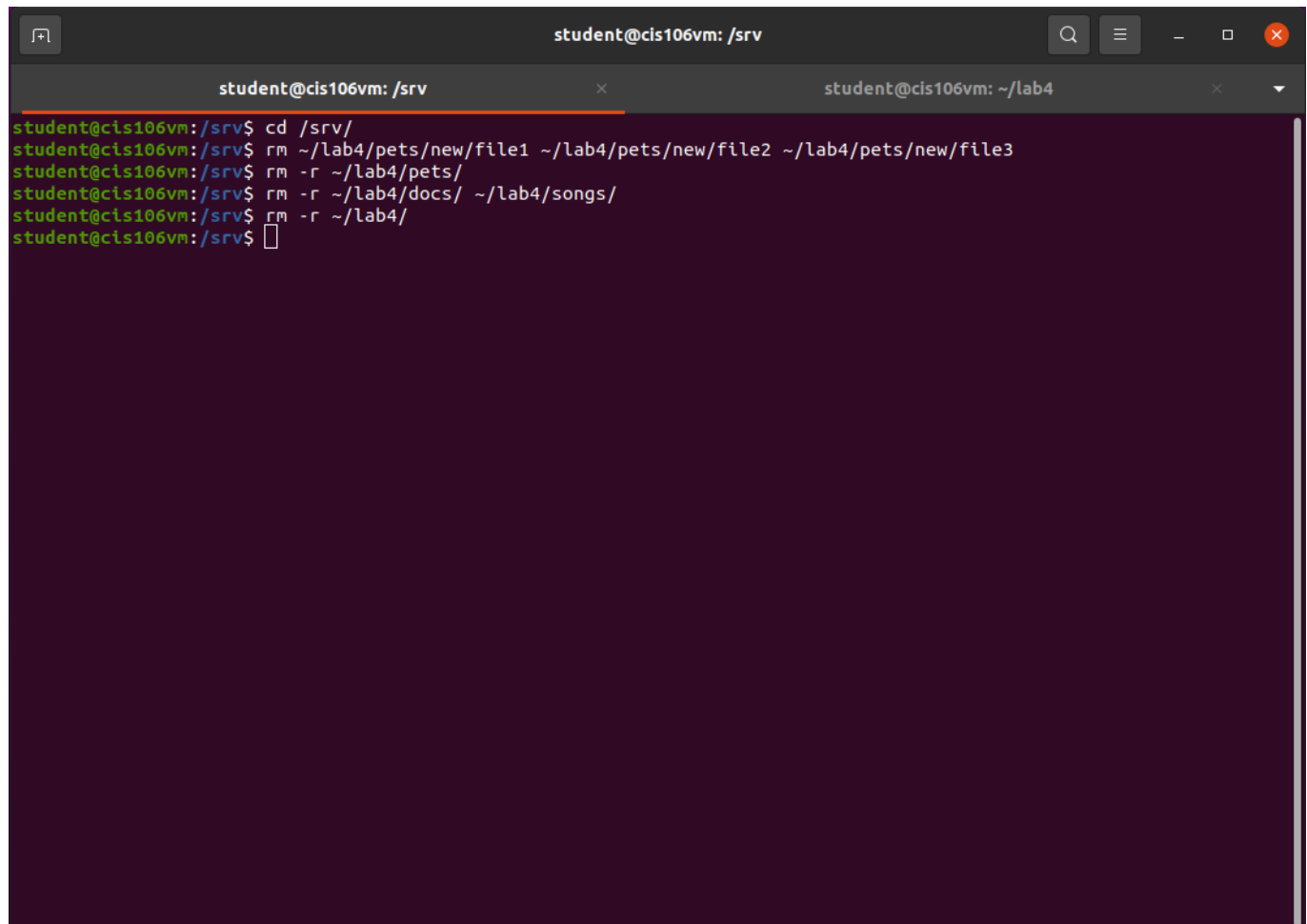
./songs/old:
file1  file2  file3
student@cis106vm:~/lab4$
```

```
student@cis106vm: ~/lab4
student@cis106vm: ~/lab4
./songs/new:
file1 file2 file3

./songs/old:
file1 file2 file3
student@cis106vm:~/lab4$ tree ~/lab4
/home/student/lab4
├── docs
│   ├── new
│   │   ├── file1
│   │   ├── file2
│   │   └── file3
│   └── old
│       ├── file1
│       ├── file2
│       └── file3
├── pets
│   ├── new
│   │   ├── file1
│   │   ├── file2
│   │   └── file3
│   └── old
│       ├── file1
│       ├── file2
│       └── file3
└── songs
    ├── new
    │   ├── file1
    │   ├── file2
    │   └── file3
    └── old
        ├── file1
        ├── file2
        └── file3

9 directories, 18 files
student@cis106vm:~/lab4$
```

Question 2

A terminal window with a dark background and light green text. The window title is "student@cis106vm: /srv". The terminal shows a series of commands and their outputs. The first command is "cd /srv/". The next three commands are "rm ~/lab4/pets/new/file1 ~/lab4/pets/new/file2 ~/lab4/pets/new/file3", "rm -r ~/lab4/pets/", and "rm -r ~/lab4/docs/ ~/lab4/songs/". The final command is "rm -r ~/lab4/". The prompt "student@cis106vm: /srv\$" is visible at the end of each line.

```
student@cis106vm: /srv$ cd /srv/
student@cis106vm: /srv$ rm ~/lab4/pets/new/file1 ~/lab4/pets/new/file2 ~/lab4/pets/new/file3
student@cis106vm: /srv$ rm -r ~/lab4/pets/
student@cis106vm: /srv$ rm -r ~/lab4/docs/ ~/lab4/songs/
student@cis106vm: /srv$ rm -r ~/lab4/
student@cis106vm: /srv$
```

Question 3

```

student@cis106vm: ~
student@cis106vm: ~
student@cis106vm: ~$ cd
student@cis106vm:~$ wget https://robertalberto.com/public/lab4.zip && unzip lab4.zip && rm lab4.zip
--2021-10-20 14:29:50-- https://robertalberto.com/public/lab4.zip
Resolving robertalberto.com (robertalberto.com)... 34.66.0.162
Connecting to robertalberto.com (robertalberto.com)|34.66.0.162|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4209377 (4.0M) [application/zip]
Saving to: 'lab4.zip'

lab4.zip                               100%[=====>]    4.01M  5.25MB/s   in 0.8s

2021-10-20 14:29:51 (5.25 MB/s) - 'lab4.zip' saved [4209377/4209377]

Archive: lab4.zip
  creating: lab4/
 extracting: lab4/.hidden
  inflating: lab4/Pexels.mp4
  inflating: lab4/Silence.mp3
  inflating: lab4/Videoleaf.mp4
  inflating: lab4/another.mp4
  inflating: lab4/audio.mp3
 extracting: lab4/fileA.txt
 extracting: lab4/fileB.txt
 extracting: lab4/filea.txt
 extracting: lab4/image1.jpeg
 extracting: lab4/image2.jpeg
 extracting: lab4/image3.png
 extracting: lab4/image4.png
 extracting: lab4/image5.gif
  inflating: lab4/song.mp3
  inflating: lab4/trivia.txt
 extracting: lab4/triviaXYZ.txt
 extracting: lab4/vita.txt
   creating: lab4/wallpaperslab4/
  inflating: lab4/wallpaperslab4/cpu.jpeg
  inflating: lab4/wallpaperslab4/keyboard.jpeg
  inflating: lab4/wallpaperslab4/pc.jpeg
student@cis106vm:~$

```

```

student@cis106vm: ~
student@cis106vm: ~
student@cis106vm: ~$ cd
student@cis106vm:~$ wget https://robertalberto.com/public/lab4.zip && unzip lab4.zip && rm lab4.zip
--2021-10-20 14:29:50-- https://robertalberto.com/public/lab4.zip
Resolving robertalberto.com (robertalberto.com)... 34.66.0.162
Connecting to robertalberto.com (robertalberto.com)|34.66.0.162|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4209377 (4.0M) [application/zip]
Saving to: 'lab4.zip'

lab4.zip                               100%[=====>]    4.01M  5.25MB/s   in 0.8s

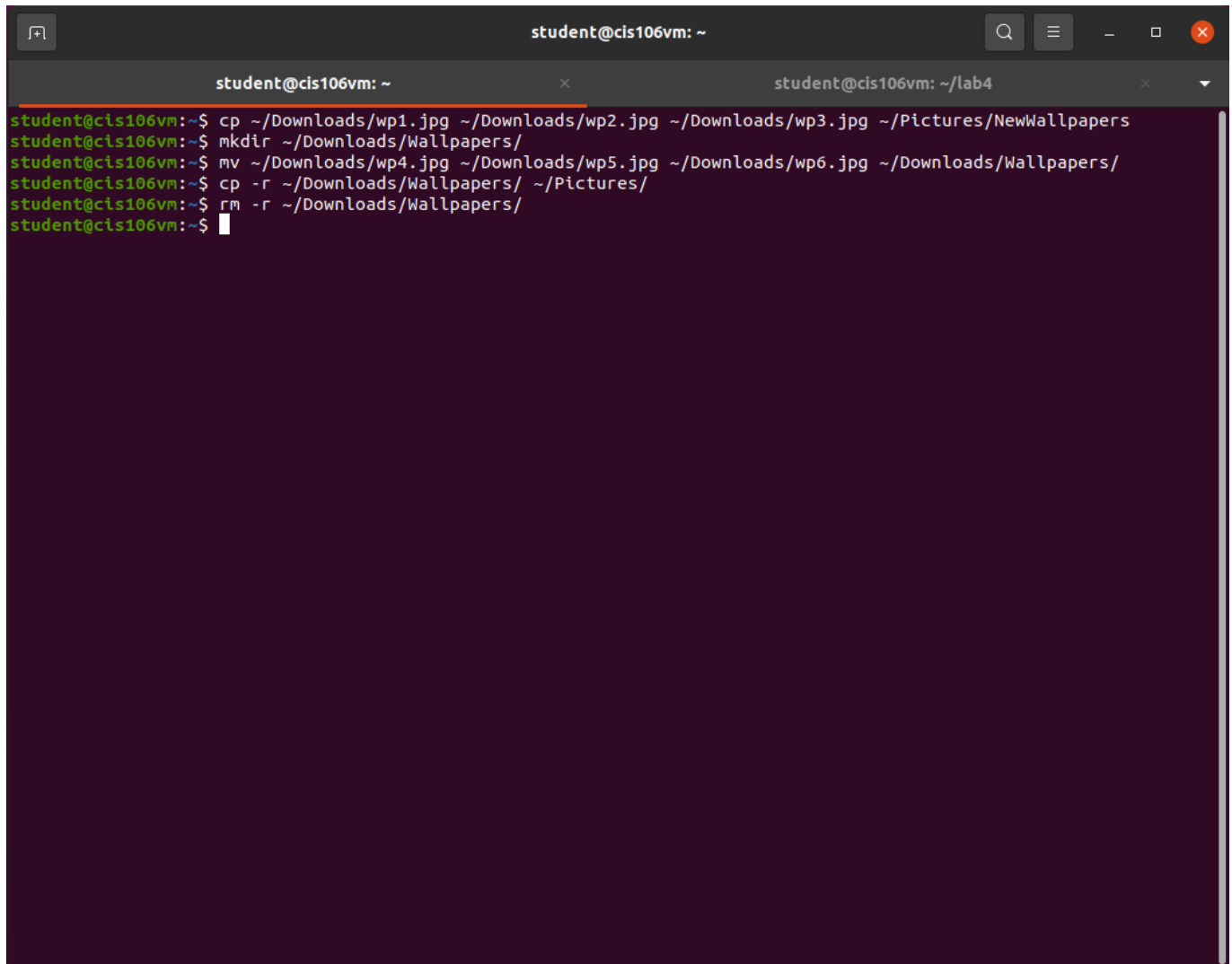
2021-10-20 14:29:51 (5.25 MB/s) - 'lab4.zip' saved [4209377/4209377]

Archive: lab4.zip
  creating: lab4/
 extracting: lab4/.hidden
  inflating: lab4/Pexels.mp4
  inflating: lab4/Silence.mp3
  inflating: lab4/Videoleaf.mp4
  inflating: lab4/another.mp4
  inflating: lab4/audio.mp3
 extracting: lab4/fileA.txt
 extracting: lab4/fileB.txt
 extracting: lab4/filea.txt
 extracting: lab4/image1.jpeg
 extracting: lab4/image2.jpeg
 extracting: lab4/image3.png
 extracting: lab4/image4.png
 extracting: lab4/image5.gif
  inflating: lab4/song.mp3
  inflating: lab4/trivia.txt
 extracting: lab4/triviaXYZ.txt
 extracting: lab4/vita.txt
   creating: lab4/wallpaperslab4/
  inflating: lab4/wallpaperslab4/cpu.jpeg
  inflating: lab4/wallpaperslab4/keyboard.jpeg
  inflating: lab4/wallpaperslab4/pc.jpeg

```

```
tin editing: lab4/wallpapers/lab4/pc.jpeg  
student@cis106vm:~$
```

Question 4

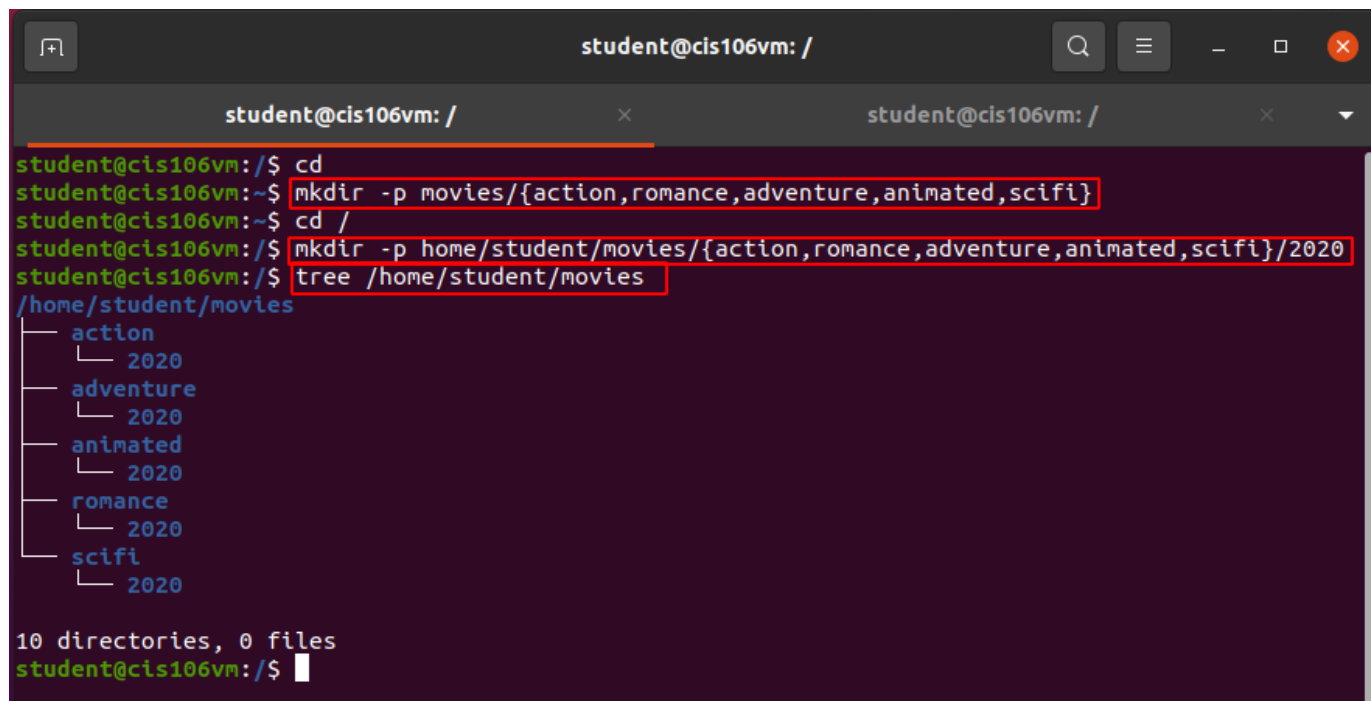


```
student@cis106vm: ~  
student@cis106vm: ~$ cp ~/Downloads/wp1.jpg ~/Downloads/wp2.jpg ~/Downloads/wp3.jpg ~/Pictures/NewWallpapers  
student@cis106vm:~$ mkdir ~/Downloads/Wallpapers/  
student@cis106vm:~$ mv ~/Downloads/wp4.jpg ~/Downloads/wp5.jpg ~/Downloads/wp6.jpg ~/Downloads/Wallpapers/  
student@cis106vm:~$ cp -r ~/Downloads/Wallpapers/ ~/Pictures/  
student@cis106vm:~$ rm -r ~/Downloads/Wallpapers/  
student@cis106vm:~$
```

Lab 4.3 | Managing files and directories

Assignment description [here](#)

Question 1



```
student@cis106vm: /
student@cis106vm:/$ cd
student@cis106vm:~$ mkdir -p movies/{action,romance,adventure,animated,scifi}
student@cis106vm:~$ cd /
student@cis106vm:/$ mkdir -p home/student/movies/{action,romance,adventure,animated,scifi}/2020
student@cis106vm:/$ tree /home/student/movies
/home/student/movies
├── action
│   └── 2020
├── adventure
│   └── 2020
├── animated
│   └── 2020
├── romance
│   └── 2020
└── scifi
    └── 2020

10 directories, 0 files
student@cis106vm:/$
```

Question 2

```

student@cis106vm: /
student@cis106vm: ~/movies
student@cis106vm:~$ cd /home/student/movies
student@cis106vm:~/movies$ touch {action,romance,adventure,animated,scifi}/moviesList.txt
student@cis106vm:~/movies$ cd /
student@cis106vm:/$ touch /home/student/movies/{action,romance,adventure,animated,scifi}/{new.doc,old.pdf}
student@cis106vm:/$ ls -lRtigG /home/student/movies
/home/student/movies:
total 20
2360580 drwxrwxr-x 3 4096 Nov 3 16:56 action
2360587 drwxrwxr-x 3 4096 Nov 3 16:56 adventure
2360588 drwxrwxr-x 3 4096 Nov 3 16:56 animated
2360586 drwxrwxr-x 3 4096 Nov 3 16:56 romance
2360590 drwxrwxr-x 3 4096 Nov 3 16:56 scifi

/home/student/movies/action:
total 4
2360604 -rw-rw-r-- 1 0 Nov 3 16:57 new.doc
2360605 -rw-rw-r-- 1 0 Nov 3 16:57 old.pdf
2360601 -rw-rw-r-- 1 0 Nov 3 16:57 moviesList.txt
2360591 drwxrwxr-x 2 4096 Nov 3 16:36 2020

/home/student/movies/action/2020:
total 0

/home/student/movies/adventure:
total 4
2360608 -rw-rw-r-- 1 0 Nov 3 16:57 new.doc
2360609 -rw-rw-r-- 1 0 Nov 3 16:57 old.pdf
2360601 -rw-rw-r-- 1 0 Nov 3 16:57 moviesList.txt
2360593 drwxrwxr-x 2 4096 Nov 3 16:36 2020

/home/student/movies/adventure/2020:
total 0

/home/student/movies/animated:
total 4
2360610 -rw-rw-r-- 1 0 Nov 3 16:57 new.doc
2360611 -rw-rw-r-- 1 0 Nov 3 16:57 old.pdf
2360602 -rw-rw-r-- 1 0 Nov 3 16:57 moviesList.txt
2360594 drwxrwxr-x 2 4096 Nov 3 16:36 2020

/home/student/movies/animated/2020:
total 0

/home/student/movies/romance:
total 4
2360606 -rw-rw-r-- 1 0 Nov 3 16:57 new.doc
2360607 -rw-rw-r-- 1 0 Nov 3 16:57 old.pdf
2360600 -rw-rw-r-- 1 0 Nov 3 16:57 moviesList.txt
2360592 drwxrwxr-x 2 4096 Nov 3 16:36 2020

/home/student/movies/romance/2020:
total 0

/home/student/movies/scifi:
total 4
2360612 -rw-rw-r-- 1 0 Nov 3 16:57 new.doc
2360613 -rw-rw-r-- 1 0 Nov 3 16:57 old.pdf
2360603 -rw-rw-r-- 1 0 Nov 3 16:57 moviesList.txt
2360595 drwxrwxr-x 2 4096 Nov 3 16:36 2020

/home/student/movies/scifi/2020:
total 0
student@cis106vm:/$

```

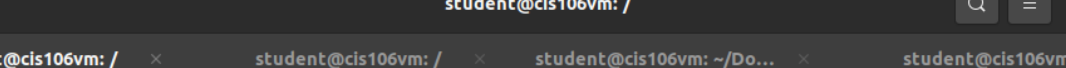
Question 3


```
student@cis106vm: ~  
student@cis106vm: ~  
student@cis106vm: ~/movies  
student@cis106vm:/$ cd /usr/share/  
student@cis106vm:/usr/share$  
student@cis106vm:/usr/share$ rm ../../home/student/movies/{action,adventure,animated,romance,scifi}/{new.doc,old.pdf}  
student@cis106vm:/usr/share$  
student@cis106vm:/usr/share$ cd /usr/bin/  
student@cis106vm:/usr/bin$ rm -r ../../home/student/movies/{action,adventure,animated,romance,scifi}  
student@cis106vm:/usr/bin$ cd ~  
student@cis106vm:~$ rmdir /movies/  
rmdir: failed to remove '/movies/': No such file or directory  
student@cis106vm:~$ rmdir movies/  
student@cis106vm:~$
```

Question 4

```
student@cis106vm: /
student@cis106vm: /
student@cis106vm: ~/Downloads
student@cis106vm:~$ cd ~
student@cis106vm:~$ mkdir -p movies/{action,romance,adventure,animated,scifi}/2020/
student@cis106vm:~$ touch movies/{action,romance,adventure,animated,scifi}/{movieList.txt,new.doc,old.pdf}
student@cis106vm:~$ cd ~
student@cis106vm:~$ cd /
student@cis106vm:/$ mv /home/student/Downloads/action.jpg /home/student/movies/action/
student@cis106vm:/$ mv /home/student/Downloads/romance.jpg /home/student/movies/romance
student@cis106vm:/$ mv /home/student/Downloads/adventure.jpg /home/student/movies/adventure
student@cis106vm:/$ mv /home/student/Downloads/animated.jpg /home/student/movies/animated
student@cis106vm:/$ mv /home/student/Downloads/scifi.jpg /home/student/movies/scifi
student@cis106vm:/$
```

Question 5



The screenshot shows a terminal window with a dark purple background. The prompt is `student@cis106vm: /`. The terminal displays four commands being entered, each followed by a prompt `student@cis106vm:/$`. The commands are: `cp -r home/student/movies home/student/Videos`, `cp /home/student/Downloads/*.mp3 /home/student/Music`, `cp /home/student/Downloads/*[Vv]id* /home/student/Videos`, and a final prompt `student@cis106vm:/$` with a cursor. The window has a title bar with standard Linux window controls and a search icon.

```
student@cis106vm:/$ cp -r home/student/movies home/student/Videos
student@cis106vm:/$ cp /home/student/Downloads/*.mp3 /home/student/Music
student@cis106vm:/$ cp /home/student/Downloads/*[Vv]id* /home/student/Videos
student@cis106vm:/$
```