Final EXam submission

Q1

```
katy@cis106:~$ ls -lGgsh  --time-style=+%D  ~/midtermfiles3/question1
total 184K
4.0K -rw-rw-r-- 1  512 05/17/22 about.html
 24K -rw-rw-r-- 1  21K 05/17/22 accounts.ods
4.0K -rw-rw-r-- 1  551 05/17/22 basicInfo.txt
4.0K -rw-rw-r-- 1  512 05/17/22 contact.html
4.0K -rw-rw-r-- 1   41 05/17/22 hello.py
4.0K -rw-rw-r-- 1   36 05/17/22 hello.rb
4.0K -rw-rw-r-- 1   32 05/17/22 hello.sh
4.0K -rw-rw-r-- 1  512 05/17/22 index.html
 12K -rw-rw-r-- 1  10K 05/17/22 linux.docx
 16K -rw-rw-r-- 1  16K 05/17/22 linux.pdf
4.0K -rw-rw-r-- 1  609 05/17/22 linux.txt
 12K -rw-rw-r-- 1  11K 05/17/22 macos.docx
4.0K -rw-rw-r-- 1 4.0K 05/17/22 MacOS_logo.svg
 20K -rw-rw-r-- 1  19K 05/17/22 macos.pdf
4.0K -rw-rw-r-- 1  978 05/17/22 macos.txt
 20K -rw-rw-r-- 1  20K 05/17/22 users-data.ods
 12K -rw-rw-r-- 1  10K 05/17/22 windows.docx
4.0K -rw-rw-r-- 1  486 05/17/22 Windows_logo.svg
 20K -rw-rw-r-- 1  17K 05/17/22 windows.pdf
4.0K -rw-rw-r-- 1  866 05/17/22 windows.txt
katy@cis106:~$
```

```
katy@cis106:~/midtermfiles3/question1$ vim organized.md
katy@cis106:~/midtermfiles3/question1$ ls -lGghX  --time-style=+%D  ~/midtermfiles3/question1
total 184K
-rw-rw-r-- 1  10K 05/17/22 linux.docx
-rw-rw-r-- 1  11K 05/17/22 macos.docx
-rw-rw-r-- 1  10K 05/17/22 windows.docx
-rw-rw-r-- 1  512 05/17/22 about.html
-rw-rw-r-- 1  512 05/17/22 contact.html
-rw-rw-r-- 1  512 05/17/22 index.html
-rw-rw-r-- 1  21K 05/17/22 accounts.ods
-rw-rw-r-- 1  20K 05/17/22 users-data.ods
-rw-rw-r-- 1  16K 05/17/22 linux.pdf
-rw-rw-r-- 1  19K 05/17/22 macos.pdf
-rw-rw-r-- 1  17K 05/17/22 windows.pdf
-rw-rw-r-- 1   41 05/17/22 hello.py
-rw-rw-r-- 1   36 05/17/22 hello.rb
-rw-rw-r-- 1   32 05/17/22 hello.sh
-rw-rw-r-- 1 4.0K 05/17/22 MacOS_logo.svg
-rw-rw-r-- 1  486 05/17/22 Windows_logo.svg
-rw-rw-r-- 1  551 05/17/22 basicInfo.txt
-rw-rw-r-- 1  609 05/17/22 linux.txt
-rw-rw-r-- 1  978 05/17/22 macos.txt
```

```
katy@cis106:~$ ls -lGgsh  --time-style=+%D  ~/midtermfiles3/question1
total 184K
4.0K -rw-rw-r-- 1  512 05/17/22 about.html
 24K -rw-rw-r-- 1  21K 05/17/22 accounts.ods
4.0K -rw-rw-r-- 1  551 05/17/22 basicInfo.txt
4.0K -rw-rw-r-- 1  512 05/17/22 contact.html
4.0K -rw-rw-r-- 1   41 05/17/22 hello.py
4.0K -rw-rw-r-- 1   36 05/17/22 hello.rb
4.0K -rw-rw-r-- 1   32 05/17/22 hello.sh
4.0K -rw-rw-r-- 1  512 05/17/22 index.html
 12K -rw-rw-r-- 1  10K 05/17/22 linux.docx
 16K -rw-rw-r-- 1  16K 05/17/22 linux.pdf
4.0K -rw-rw-r-- 1  609 05/17/22 linux.txt
 12K -rw-rw-r-- 1  11K 05/17/22 macos.docx
4.0K -rw-rw-r-- 1 4.0K 05/17/22 MacOS_logo.svg
 20K -rw-rw-r-- 1  19K 05/17/22 macos.pdf
4.0K -rw-rw-r-- 1  978 05/17/22 macos.txt
 20K -rw-rw-r-- 1  20K 05/17/22 users-data.ods
 12K -rw-rw-r-- 1  10K 05/17/22 windows.docx
4.0K -rw-rw-r-- 1  486 05/17/22 Windows_logo.svg
 20K -rw-rw-r-- 1  17K 05/17/22 windows.pdf
4.0K -rw-rw-r-- 1  866 05/17/22 windows.txt
katy@cis106:~$
```

Q2

```
katy@cis106:~$ touch inf.txt
katy@cis106:~$ wc -l /etc/passwd >> inf.txt
katy@cis106:~$ grep "/bin/bash" /etc/passwd | wc -l >> inf.txt
```

Q3

```
katy@cis106:~$ mkdir -p spring22/{CIS106,CIS180,EN102}/{hmw,material/book,notes}
katy@cis106:~$ tree spring22
spring22
├── CIS106
│   ├── hmw
│   ├── material
│   │   └── book
│   └── notes
├── CIS180
│   ├── hmw
│   ├── material
│   │   └── book
│   └── notes
└── EN102
    ├── hmw
    ├── material
    │   └── book
    └── notes

15 directories, 0 files
katy@cis106:~$ ls ~/midtermfiles3/question3
comp2syllabus.pdf  linuxhmw.pdf      networkingbook.pdf  networkingnotes.pdf
Linuxbook.pdf         linuxnotes.pdf   networkinghmw.pdf
katy@cis106:~$ mv ~/midtermfiles3/question3/Linuxbook.pdf ~/midtermfiles3/question3/CIS106/mat
erial/book
mv: cannot move '/home/katy/midtermfiles3/question3/Linuxbook.pdf' to '/home/katy/midtermfiles
3/question3/CIS106/material/book': No such file or directory
katy@cis106:~$ mv ~/midtermfiles3/question3/Linuxbook.pdf ~/spring22/CIS106/material/book
```

```
15 directories, 1 file
katy@cis106:~$ ls ~/midtermfiles3/question3
comp2syllabus.pdf  linuxnotes.pdf      networkinghmw.pdf
linuxhmw.pdf         networkingbook.pdf  networkingnotes.pdf
katy@cis106:~$ mv ~/midtermfiles3/question3/comp2syllabus.pdf ~/spring22/EN102/notes
```

```
15 directories, 2 files
katy@cis106:~$ mv
mv: missing file operand
Try 'mv --help' for more information.
katy@cis106:~$ ls ~/midtermfiles3/question3
linuxhmw.pdf  linuxnotes.pdf  networkingbook.pdf  networkinghmw.pdf  networkingnotes.pdf
katy@cis106:~$ mv~/midtermfiles3/question3/linuxhmw.pdf ~/spring22/CIS106/hmw
bash: mv~/midtermfiles3/question3/linuxhmw.pdf: No such file or directory
katy@cis106:~$ mv ~/midtermfiles3/question3/linuxhmw.pdf ~/spring22/CIS106/hmw
katy@cis106:~$ mv ~/midtermfiles3/question3/linuxnotes.pdf ~/spring22/CIS106/notes
katy@cis106:~$ mv ~/midtermfiles3/question3/networkingbook.pdf ~/spring22/CIS180/material/book
katy@cis106:~$ mv ~/midtermfiles3/question3/networkinghmw.pdf ~/spring22/CIS180/hmw
katy@cis106:~$ mv ~/midtermfiles3/question3/networkingnotes.pdf ~/spring22/CIS180/notes
katy@cis106:~$
```

```
0 directories, 0 files
katy@cis106:~$ tree spring22
spring22
├── CIS106
│   ├── hmw
│   │   └── linuxhmw.pdf
│   ├── material
│   │   └── book
│   │       └── Linuxbook.pdf
│   └── notes
│       └── linuxnotes.pdf
├── CIS180
│   ├── hmw
│   │   └── networkinghmw.pdf
│   ├── material
│   │   └── book
│   │       └── networkingbook.pdf
│   └── notes
│       └── networkingnotes.pdf
├── EN102
│   ├── hmw
│   ├── material
│   │   └── book
│   └── notes
│       └── comp2syllabus.pdf

15 directories, 7 files
```

```
katy@cis106:~$ tree --charset spring22 > katrina.html
katy@cis106:~$ sudo apt install apache2 -y
[sudo] password for katy:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  kio libatomic1:i386 libbasicusageenvironment1 libbsd0:i386 libcddb2 libdrm-amdgpu1:i386
  libdrm-intel1:i386 libdrm-nouveau2:i386 libdrm-radeon1:i386 libdrm2:i386 libdvbpsi10
  libedit2:i386 libelf1:i386 libexpat1:i386 libffi7:i386 libfwupdplugin1 libgl1:i386
  libgl1-mesa-dri:i386 libgl1-mesa-glx:i386 libglapi-mesa:i386 libglvnd0:i386
  libglx-mesa0:i386 libglx0:i386 libgroupsock8 libhfstospell10 libixml10 libkate1
  libkf5archive5 libkf5attica5 libkf5completion-data libkf5completion5 libkf5doctools5
  libkf5globalaccel-bin libkf5globalaccel-data libkf5globalaccel5 libkf5globalaccelprivate5
  libkf5iconthemes-bin libkf5iconthemes-data libkf5iconthemes5 libkf5itemviews-data
```

Directory Tree

```
spring22
├── 2022-05-16_17-29.png
├── 2022-05-16_18-14.png
├── 2022-05-16_18-22.png
├── 2022-05-16_18-34.png
├── allmyfiles.txt
├── cis106
│   ├── cheat sheets
│   │   ├── Absolute Path VS Relative Path Cheat sheet.png
│   │   ├── except.png
│   │   ├── grepcommand.html
│   │   ├── grepstartsand end.png
│   │   ├── Linux Workshop Ubuntu Software installation cheat sheet.png
│   │   ├── markdown-cheatsheet.pdf
│   │   ├── pasted image 0.png
│   │   ├── tar.png
│   │   ├── The LS command Cheat Sheet(1).png
│   │   ├── usingcomplement.png
│   │   ├── WILDCARDS_FILE GLOBBING CHEAT SHEET.png
│   │   └── xz.png
│   ├── FinalExam
│   │   ├── Final-Katiuska-nunez.md
│   │   ├── q3.1.png
│   │   ├── q3.2.png
│   │   ├── q3.4.png
│   │   ├── q3.5.png
│   │   ├── q3.6.png
│   │   ├── q4.1.png
│   │   └── q4.2.png
│   ├── FinalProject
│   │   ├── Apache.png
│   │   ├── deliverable1.jpeg
│   │   ├── deliverable1.md
│   │   ├── deliverable1.pdf
│   │   ├── deliverable1.png
│   │   ├── Deliverable2
│   │   │   ├── clientsidevirtualization.jpg
│   │   │   ├── deliverable2.md
│   │   │   ├── deliverable2.pdf
```

```
>
          |       |     └── <a href="spring22/spring22/EN102/material/book/">book<
a><br>
              └── <a href="spring22/spring22/EN102/notes/">notes</a><br>
                  └── <a href="spring22/spring22/EN102/notes/
omp2syllabus.pdf">comp2syllabus.pdf</a><br>
        ├── <a href="spring22/Steam/">Steam</a><br>
        └── <a href="spring22/Steam/logs/">logs</a><br>
              └── <a href="spring22/Steam/logs/bootstrap_log.txt">bootstrap_
og.txt</a><br>
        ├── <a href="spring22/Templates/">Templates</a><br>
        ├── <a href="spring22/todolist.txt">todolist.txt</a><br>
        ├── <a href="spring22/userbinbash.txt">userbinbash.txt</a><br>
        ├── <a href="spring22/users.txt">users.txt</a><br>
        ├── <a href="spring22/Videos/">Videos</a><br>
        └── <a href="spring22/website/">website</a><br>
              ├── <a href="spring22/website/index.html">index.html</a><br>
              ├── <a href="spring22/website/index.php">index.php</a><br>
              ├── <a href="spring22/website/index.txt">index.txt</a><br>
              ├── <a href="spring22/website/index.xml">index.xml</a><br>
              ├── <a href="spring22/website/script.go">script.go</a><br>
              ├── <a href="spring22/website/script.py">script.py</a><br>
              └── <a href="spring22/website/script.rb">script.rb</a><br>
        <br><br>
        </p>
        <p>

182 directories, 541 files
        <br><br>
        </p>
        <hr>
        <p class="VERSION">
                tree v1.8.0 © 1996 - 2018 by Steve Baker and Thomas Moore <br>
                HTML output hacked and copyleft © 1998 by Francesc Rocher <br>
                JSON output hacked and copyleft © 2014 by Florian Sesser <br>
                Charsets / OS/2 support © 2001 by Kyosuke Tokoro
        </p>
</body>
</html>
katy@cis106:~$ tree -H spring22 > katrina.html
katy@cis106:~$ sudo mv katrina.html /var/www/html/
katy@cis106:~$ □
```

Q4

```
katy@cis106:~$ cd ~/midtermfiles3/question1
katy@cis106:~/midtermfiles3/question1$ ls
about.html      hello.py    linux.docx   MacOS_logo.svg   users-data.ods   windows.txt
accounts.ods    hello.rb    linux.pdf    macos.pdf        windows.docx
basicInfo.txt   hello.sh    linux.txt    macos.txt        Windows_logo.svg
contact.html    index.html  macos.docx   Ubuntu-logo.svg  windows.pdf
katy@cis106:~/midtermfiles3/question1$ pwd Ubuntu-logo.svg
/home/katy/midtermfiles3/question1
katy@cis106:~/midtermfiles3/question1$ ls -i Ubuntu-logo.svg
545844 Ubuntu-logo.svg
katy@cis106:~/midtermfiles3/question1$ sudo mv ~/midtermfiles3/question1/Ubuntu-logo.svg /usr/
share/backgrounds/ubuntuLog.svg
[sudo] password for katy:
katy@cis106:~/midtermfiles3/question1$ ls -l *.svg
-rw-rw-r-- 1 katy katy 3997 May 17 18:11 MacOS_logo.svg
-rw-rw-r-- 1 katy katy  486 May 17 18:11 Windows_logo.svg
katy@cis106:~/midtermfiles3/question1$ ls -l  --full-time *.svg
-rw-rw-r-- 1 katy katy 3997 2022-05-17 18:11:01.152907783 -0400 MacOS_logo.svg
-rw-rw-r-- 1 katy katy  486 2022-05-17 18:11:01.152907783 -0400 Windows_logo.svg
katy@cis106:~/midtermfiles3/question1$
```

```
0 directories, 20 files
katy@cis106:~/midtermfiles3/question1$ tree -pshD
.
├── [-rw-rw-r--   512 May 17 18:11]  about.html
├── [-rw-rw-r--   20K May 17 18:11]  accounts.ods
├── [-rw-rw-r--   551 May 17 18:11]  basicInfo.txt
├── [-rw-rw-r--   512 May 17 18:11]  contact.html
├── [-rw-rw-r--    41 May 17 18:11]  hello.py
├── [-rw-rw-r--    36 May 17 18:11]  hello.rb
├── [-rw-rw-r--    32 May 17 18:11]  hello.sh
├── [-rw-rw-r--   512 May 17 18:11]  index.html
├── [-rw-rw-r--  9.9K May 17 18:11]  linux.docx
├── [-rw-rw-r--   16K May 17 18:11]  linux.pdf
├── [-rw-rw-r--   609 May 17 18:11]  linux.txt
├── [-rw-rw-r--   10K May 17 18:11]  macos.docx
├── [-rw-rw-r--  3.9K May 17 18:11]  MacOS_logo.svg
├── [-rw-rw-r--   18K May 17 18:11]  macos.pdf
├── [-rw-rw-r--   978 May 17 18:11]  macos.txt
├── [-rw-rw-r--   20K May 17 18:11]  users-data.ods
├── [-rw-rw-r-- 10.0K May 17 18:11]  windows.docx
├── [-rw-rw-r--   486 May 17 18:11]  Windows_logo.svg
├── [-rw-rw-r--   17K May 17 18:11]  windows.pdf
└── [-rw-rw-r--   866 May 17 18:11]  windows.txt
```