

Lab 9

Q1

```
eli@cis106:~$ cd cis106/labs/lab9/
eli@cis106:~/cis106/labs/lab9$ echo "All files in my home directory" > file_report.txt
eli@cis106:~/cis106/labs/lab9$ ls -Am ~ >> file_report.txt
eli@cis106:~/cis106/labs/lab9$ cat file_report.txt
All files in my home directory
access.log, assets, .bash_aliases, .bash_history, .bash_logout, .bashrc,
.bastetrc, bball-site, .cache, cis106, colors, .config, Desktop, Documents,
.dotnet, Downloads, essentials.sh, essentials.sh.1, .face, .face.icon,
FinalExamStudyNotes, .fonts, .gitconfig, .gnupg, hah3, homework,
inClassActivity, index.html, lab6-challenge1, lab6-challenge2, .local,
Markdown Cheat sheet For CIS 106 Linux Fundamentals.png, marstenHouse,
marstenhouse.sh, .mozilla, music, Music, pages, Pictures, .pki, portfolio,
practicels, .profile, Public, scripts, snap, snapshots,
sorted_access_log_by_endpoint.loclear, sorted_access_log_by_endpoint.log,
sorted_access_log_by_uname.log, .ssh, .sudo_as_admin_successful, Templates,
testscripts, touch, .vboxclient-clipboard-tty2-control.pid,
.vboxclient-clipboard-tty2-service.pid,
.vboxclient-draganddrop-tty2-control.pid,
.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,
.vboxclient-vmsvga-session-tty2-control.pid,
.vboxclient-vmsvga-session-tty2-service.pid, Videos, .vscode, vscode.sh,
vscode.sh.1, wallpapers, web, website, website_ch1_lab7, websiteclear,
website.index.html, .wget-hsts, wildcardpractice.
```

Q2

```
eli@cis106:~$ cd cis106/labs/lab9/
eli@cis106:~/cis106/labs/lab9$ echo "All files in my home directory" > file_report.txt
eli@cis106:~/cis106/labs/lab9$ ls -Am ~ >> file_report.txt
eli@cis106:~/cis106/labs/lab9$ cat file_report.txt
All files in my home directory
access.log, assets, .bash_aliases, .bash_history, .bash_logout, .bashrc,
.bastetrc, bball-site, .cache, cis106, colors, .config, Desktop, Documents,
.dotnet, Downloads, essentials.sh, essentials.sh.1, .face, .face.icon,
FinalExamStudyNotes, .fonts, .gitconfig, .gnupg, hah3, homework,
inClassActivity, index.html, lab6-challenge1, lab6-challenge2, .local,
Markdown Cheat sheet For CIS 106 Linux Fundamentals.png, marstenHouse,
marstenhouse.sh, .mozilla, music, Music, pages, Pictures, .pki, portfolio,
practicels, .profile, Public, scripts, snap, snapshots,
sorted_access_log_by_endpoint.loclear, sorted_access_log_by_endpoint.log,
sorted_access_log_by_uname.log, .ssh, .sudo_as_admin_successful, Templates,
testscripts, touch, .vboxclient-clipboard-tty2-control.pid,
.vboxclient-clipboard-tty2-service.pid,
.vboxclient-draganddrop-tty2-control.pid,
.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,
.vboxclient-vmsvga-session-tty2-control.pid,
.vboxclient-vmsvga-session-tty2-service.pid, Videos, .vscode, vscode.sh,
vscode.sh.1, wallpapers, web, website, website_ch1_lab7, websiteclear,
website.index.html, .wget-hsts, wildcardpractice,
wildcards-in-class-activity-instructions.html
eli@cis106:~/cis106/labs/lab9$ celar
bash: celar: command not found
eli@cis106:~/cis106/labs/lab9$ echo "Total number of files in my home directory" >> file_report.txt
eli@cis106:~/cis106/labs/lab9$ ls -lA ~ | grep "^-" | wc -l >>file_report.txt
eli@cis106:~/cis106/labs/lab9$ echo "Total number of directories in my home directory" >> file_report.txt
```

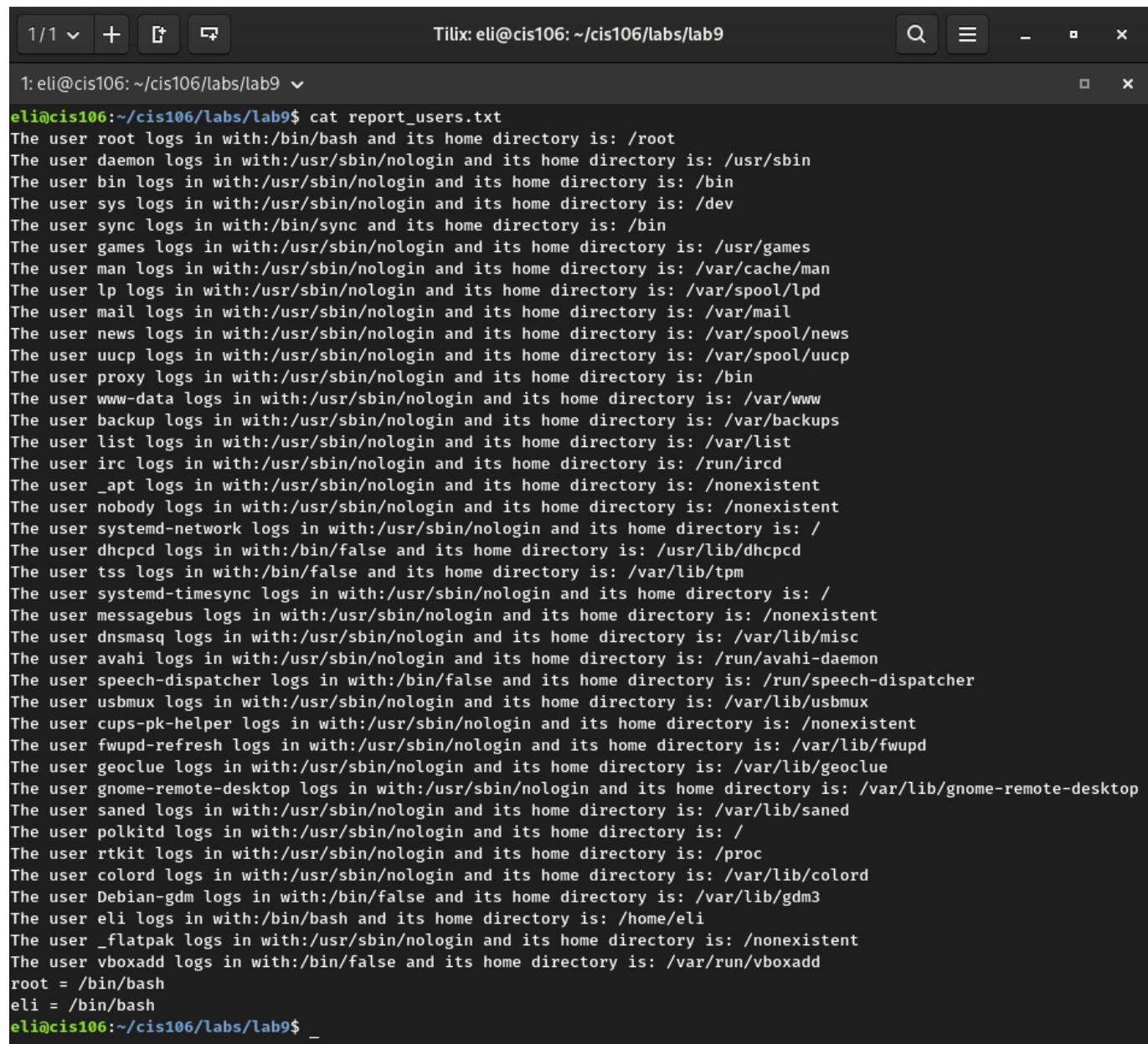
```
eli@cis106:~/cis106/labs/lab9$ ls -lA ~ | grep "^d" | wc -l >>file_report.txt
eli@cis106:~/cis106/labs/lab9$ tail file_report.txt
.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,
.vboxclient-vmsvga-session-tty2-control.pid,
.vboxclient-vmsvga-session-tty2-service.pid, Videos, .vscode, vscode.sh,
vscode.sh.1, wallpapers, web, website, website_ch1_lab7, websiteclear,
website.index.html, .wget-hsts, wildcardpractice,
wildcards-in-class-activity-instructions.html
Total number of files in my home directory
31
Total number of directories in my home directory
43
eli@cis106:~/cis106/labs/lab9$ _
```

```
speech-dispatcher /bin/false
usbmux /usr/sbin/nologin
cups-pk-helper /usr/sbin/nologin
fwupd-refresh /usr/sbin/nologin
geoclue /usr/sbin/nologin
gnome-remote-desktop /usr/sbin/nologin
saned /usr/sbin/nologin
polkitd /usr/sbin/nologin
rtkit /usr/sbin/nologin
colord /usr/sbin/nologin
Debian-gdm /bin/false
eli /bin/bash
_flatpak /usr/sbin/nologin
vboxadd /bin/false
eli@cis106:~/cis106/labs/lab9$ awk -F":" '{print $1,$NF}' /etc/passwd_
q3
```

```
messagebus /usr/sbin/nologin /nonexistent
dnsmasq /usr/sbin/nologin /var/lib/misc
avahi /usr/sbin/nologin /run/avahi-daemon
speech-dispatcher /bin/false /run/speech-dispatcher
usbmux /usr/sbin/nologin /var/lib/usbmux
cups-pk-helper /usr/sbin/nologin /nonexistent
Fwupd-refresh /usr/sbin/nologin /var/lib/fwupd
geoclue /usr/sbin/nologin /var/lib/geoclue
gnome-remote-desktop /usr/sbin/nologin /var/lib/gnome-remote-desktop
saned /usr/sbin/nologin /var/lib/saned
polkitd /usr/sbin/nologin /
rtkit /usr/sbin/nologin /proc
colord /usr/sbin/nologin /var/lib/colord
Debian-gdm /bin/false /var/lib/gdm3
eli /bin/bash /home/eli
_flatpak /usr/sbin/nologin /nonexistent
vboxadd /bin/false /var/run/vboxadd
eli@cis106:~/cis106/labs/lab9$ awk -F":" '{print $1,$NF,$6}' /etc/passwd_
```

```
The user colord logs in with:/usr/sbin/nologin and its home directory is: /var/lib/colord
The user Debian-gdm logs in with:/bin/false and its home directory is: /var/lib/gdm3
The user eli logs in with:/bin/bash and its home directory is: /home/eli
The user _flatpak logs in with:/usr/sbin/nologin and its home directory is: /nonexistent
The user vboxadd logs in with:/bin/false and its home directory is: /var/run/vboxadd
eli@cis106:~/cis106/labs/lab9$ awk -F":" '{print "The user " $1,"logs in with:"$NF,"and its home directory is: "$6}' /etc/passwd_
```

```
polkitd = /usr/sbin/nologin
rtkit = /usr/sbin/nologin
colord = /usr/sbin/nologin
Debian-gdm = /bin/false
eli = /bin/bash
_flatpak = /usr/sbin/nologin
vboxadd = /bin/false
eli@cis106:~/cis106/labs/lab9$ awk -F":" '{print $1" = "$NF}' /etc/passwd | grep "/bin/bash"
root = /bin/bash
eli = /bin/bash
eli@cis106:~/cis106/labs/lab9$ awk -F":" '{print $1" = "$NF}' /etc/passwd | grep "/bin/bash" >> report_users.txt
eli@cis106:~/cis106/labs/lab9$ _
```



```
1: eli@cis106: ~/cis106/labs/lab9 ▼
eli@cis106:~/cis106/labs/lab9$ cat report_users.txt
The user root logs in with:/bin/bash and its home directory is: /root
The user daemon logs in with:/usr/sbin/nologin and its home directory is: /usr/sbin
The user bin logs in with:/usr/sbin/nologin and its home directory is: /bin
The user sys logs in with:/usr/sbin/nologin and its home directory is: /dev
The user sync logs in with:/bin/sync and its home directory is: /bin
The user games logs in with:/usr/sbin/nologin and its home directory is: /usr/games
The user man logs in with:/usr/sbin/nologin and its home directory is: /var/cache/man
The user lp logs in with:/usr/sbin/nologin and its home directory is: /var/spool/lpd
The user mail logs in with:/usr/sbin/nologin and its home directory is: /var/mail
The user news logs in with:/usr/sbin/nologin and its home directory is: /var/spool/news
The user uucp logs in with:/usr/sbin/nologin and its home directory is: /var/spool/uucp
The user proxy logs in with:/usr/sbin/nologin and its home directory is: /bin
The user www-data logs in with:/usr/sbin/nologin and its home directory is: /var/www
The user backup logs in with:/usr/sbin/nologin and its home directory is: /var/backups
The user list logs in with:/usr/sbin/nologin and its home directory is: /var/list
The user irc logs in with:/usr/sbin/nologin and its home directory is: /run/ircd
The user _apt logs in with:/usr/sbin/nologin and its home directory is: /nonexistent
The user nobody logs in with:/usr/sbin/nologin and its home directory is: /nonexistent
The user systemd-network logs in with:/usr/sbin/nologin and its home directory is: /
The user dhcpcd logs in with:/bin/false and its home directory is: /usr/lib/dhcpcd
The user tss logs in with:/bin/false and its home directory is: /var/lib/tpm
The user systemd-timesync logs in with:/usr/sbin/nologin and its home directory is: /
The user messagebus logs in with:/usr/sbin/nologin and its home directory is: /nonexistent
The user dnsmasq logs in with:/usr/sbin/nologin and its home directory is: /var/lib/misc
The user avahi logs in with:/usr/sbin/nologin and its home directory is: /run/avahi-daemon
The user speech-dispatcher logs in with:/bin/false and its home directory is: /run/speech-dispatcher
The user usbmux logs in with:/usr/sbin/nologin and its home directory is: /var/lib/usbmux
The user cups-pk-helper logs in with:/usr/sbin/nologin and its home directory is: /nonexistent
The user fwupd-refresh logs in with:/usr/sbin/nologin and its home directory is: /var/lib/fwupd
The user geoclue logs in with:/usr/sbin/nologin and its home directory is: /var/lib/geoclue
The user gnome-remote-desktop logs in with:/usr/sbin/nologin and its home directory is: /var/lib/gnome-remote-desktop
The user saned logs in with:/usr/sbin/nologin and its home directory is: /var/lib/saned
The user polkitd logs in with:/usr/sbin/nologin and its home directory is: /
The user rtkit logs in with:/usr/sbin/nologin and its home directory is: /proc
The user colord logs in with:/usr/sbin/nologin and its home directory is: /var/lib/colord
The user Debian-gdm logs in with:/bin/false and its home directory is: /var/lib/gdm3
The user eli logs in with:/bin/bash and its home directory is: /home/eli
The user _flatpak logs in with:/usr/sbin/nologin and its home directory is: /nonexistent
The user vboxadd logs in with:/bin/false and its home directory is: /var/run/vboxadd
root = /bin/bash
eli = /bin/bash
eli@cis106:~/cis106/labs/lab9$ _
```

Q4

```

eli@cis106:~/cis106/labs/lab9$ grep -i "honda" ~/Documents/sample_files/Csv/cars.csv > honda1.csv
eli@cis106:~/cis106/labs/lab9$ head -1 ~/Documents/sample_files/Csv/cars.csv > honda1.csv
eli@cis106:~/cis106/labs/lab9$ cat honda1.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
eli@cis106:~/cis106/labs/lab9$ grep -i "honda" ~/Documents/sample_files/Csv/cars.csv >> honda1.csv
eli@cis106:~/cis106/labs/lab9$ sed 's/;/,/g' honda1.csv
Car,MPG,Cylinders,Displacement,Horsepower,Weight,Acceleration,Model,Origin
Honda Civic,24.0,4,120.0,97.00,2489.,15.0,74,Japan
Honda Civic CVCC,33.0,4,91.00,53.00,1795.,17.5,75,Japan
Honda Civic,33.0,4,91.00,53.00,1795.,17.4,76,Japan
Honda Accord CVCC,31.5,4,98.00,68.00,2045.,18.5,77,Japan
Honda Civic CVCC,36.1,4,91.00,60.00,1800.,16.4,78,Japan
Honda Accord LX,29.5,4,98.00,68.00,2135.,16.6,78,Japan
Honda Civic 1500 gl,44.6,4,91.00,67.00,1850.,13.8,80,Japan
Honda Accord,32.4,4,107.0,72.00,2290.,17.0,80,Japan
Honda Civic 1300,35.1,4,81.00,60.00,1760.,16.1,81,Japan
Honda Prelude,33.7,4,107.0,75.00,2210.,14.4,81,Japan
Honda Accord,36.0,4,107.0,75.00,2205.,14.5,82,Japan
Honda Civic,38.0,4,91.00,67.00,1965.,15.0,82,Japan
Honda Civic (auto),32.0,4,91.00,67.00,1965.,15.7,82,Japan
eli@cis106:~/cis106/labs/lab9$ sed 's/;/,/g' honda1.csv > honda2.csv
eli@cis106:~/cis106/labs/lab9$ _

```

```

Honda_Civic 1500 gl ,4 ,67.00
Honda_Accord ,4 ,72.00
Honda_Civic 1300 ,4 ,60.00
Honda_Prelude ,4 ,75.00
Honda_Accord ,4 ,75.00
Honda_Civic ,4 ,67.00
Honda_Civic (auto) ,4 ,67.00
eli@cis106:~/cis106/labs/lab9$ awk -F "," 'NR > 1 {print $1,",$
honda3.csv
eli@cis106:~/cis106/labs/lab9$ batcat honda3.csv

```

	File: honda3.csv
1	model,cylinder,hp
2	Honda_Civic ,4 ,97.00
3	Honda_Civic CVCC ,4 ,53.00
4	Honda_Civic ,4 ,53.00
5	Honda_Accord CVCC ,4 ,68.00
6	Honda_Civic CVCC ,4 ,60.00
7	Honda_Accord LX ,4 ,68.00
8	Honda_Civic 1500 gl ,4 ,67.00
9	Honda_Accord ,4 ,72.00
10	Honda_Civic 1300 ,4 ,60.00
11	Honda_Prelude ,4 ,75.00
12	Honda_Accord ,4 ,75.00
13	Honda_Civic ,4 ,67.00
14	Honda_Civic (auto) ,4 ,67.00

```

eli@cis106:~/cis106/labs/lab9$ _

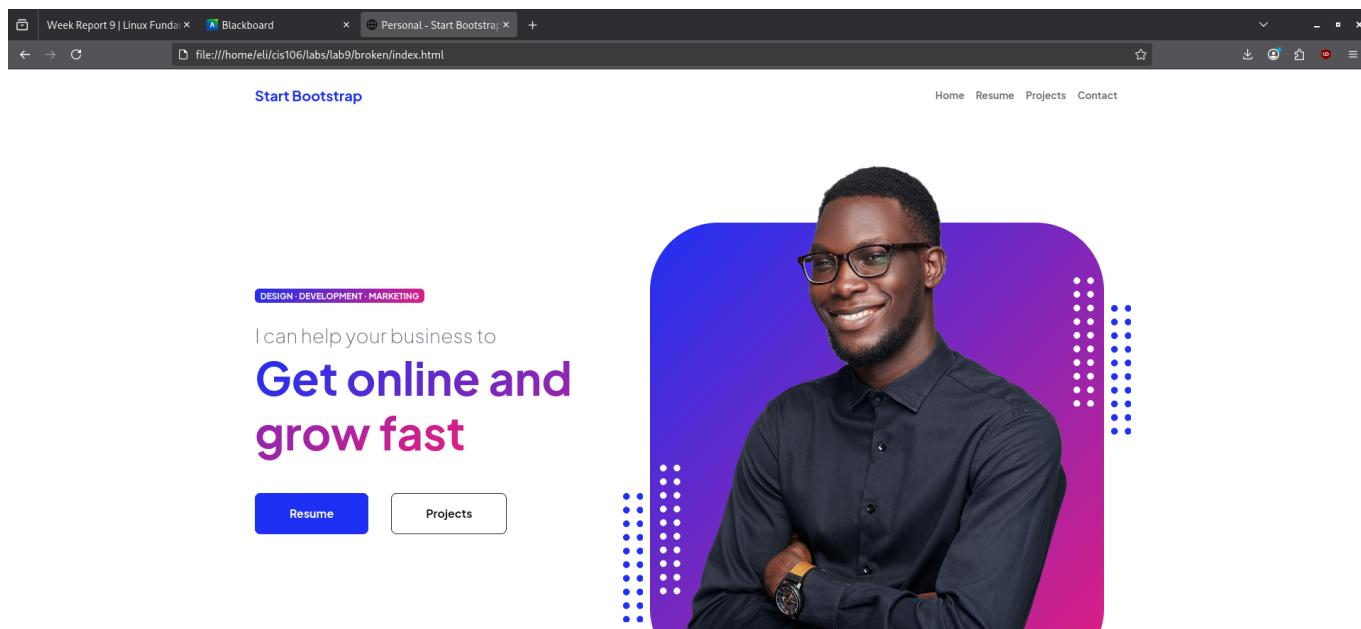
```

Challenge Question

```

1: eli@cis106:~/cis106/labs/lab9/broken$ ls
contact.html profile.png scripts.js
favicon.ico projects.html styles.css
index.html resume.html
eli@cis106:~/cis106/labs/lab9/broken$ cat index.html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no" />
    <meta name="description" content="" />
    <meta name="author" content="" />
    <title>Personal - Start Bootstrap Theme</title>
    <!-- Favicon -->
2: eli@cis106:~/cis106/labs/lab9/broken$ grep -E 'href=|src=' index.html
  <a class="small" href="#">Contact</a>
  <link rel="icon" type="image/x-icon" href="assets/favicon.ico" />
  <link rel="preconnect" href="https://fonts.googleapis.com" />
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin />
  <link href="https://fonts.googleapis.com/css2?family=Plus+Jakarta+Sans:wght@100;200;300;400;500;600;700;800;900&display=swap" rel="stylesheet" />
  <link href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.8.1/font/bootstrap-icons.css" rel="stylesheet" />
  <link href="css/styles.css" rel="stylesheet" />
  <a class="navbar-brand" href="index.html">Start Bootstrap</a>
  <li class="nav-item"><a class="nav-link" href="index.html">Home</a></li>
  <li class="nav-item"><a class="nav-link" href="resume.html">Resume</a></li>
3: eli@cis106:~/cis106/labs/lab9/broken$ cd cis106/labs/lab9/broken/
4: eli@cis106:~/cis106/labs/lab9/broken$ ls
assets contact.html css index.html js projects.html resume.html
eli@cis106:~/cis106/labs/lab9/broken$ firefox index.html
eli@cis106:~/cis106/labs/lab9/broken$ _

```



The screenshot shows a web browser window with the URL `file:///home/elu/cis106/labs/lab9/broken/projects.html`. The page title is "Start Bootstrap". At the top right, there are links for "Home", "Resume", "Projects", and "Contact". The main heading is "Projects". Below it, there is a card for "Project Name 1" which includes a placeholder text block and a dark gray placeholder image labeled "300 x 400". There is also another dark gray placeholder image below it.

The screenshot shows a web browser window with the URL `file:///home/elu/cis106/labs/lab9/broken/contact.html`. The page title is "Modern Business - Start Bootstrap". The main heading is "Get in touch" with the subtext "Let's work together!". Below this are four input fields: "Full name", "Email address", "Phone number", and "Message". A large blue "Submit" button is at the bottom. At the bottom of the page, there is copyright information "Copyright © Your Website 2023" and links for "Privacy · Terms · Contact".