

COEN 11 Lab 1

Terminal Command Line

`cd directory` → changes to the *directory*

`vi file` → opens the *file* in a vi editor

`cd ..` → returns to the previous parent directory

Command Line cheat sheet:

<https://cheatography.com/davechild/cheat-sheets/linux-command-line/>

Vi/Vim Commands

Inside the file type **i** to start editing the file

To save a file press the “Esc” key, type **:w** and then press enter

To save and quit press the “Esc” key, type **:wq** and press enter

To exit a file press the “Esc” key, type **:q** and press enter

Vim command cheat sheet: <https://vim.rtorr.com/>

.vimrc Configuration

.vimrc file is in the ~ directory on Linux machines and allows you to configure your vi editor.

It will be really helpful later on in the lab.

Top 50 configurations:

<https://www.shortcutfoo.com/blog/top-50-vim-configuration-options/>

```
1 set number
2 syntax on
3 set ai
4 set cin
5 set tabstop=5
6 set shiftwidth=5
7 set mouse=a
8 colorscheme desert
```

Steps

1. Open up Terminal and connect to the Linux computers:
ssh -l username linux.dc.engr.scu.edu
2. Create a COEN 11 directory: ***mkdir coen11***
3. Make a file: ***vi lab1.c***
4. Compile the file: ***gcc -o lab1 lab1.c***
5. Test your file: ***./lab1***

Requirements

Edit the “.c” file using vi in the terminal

2 functions ~ main() and division()

main() ~ has a for loop (runs 10 times): generate random numbers and passes them to division(); outputs if right or wrong and the correct answer

division() ~ prints the numbers (printf) and reads in the answer (scanf); returns 0 if wrong and 1 if right

Compare the results and count how many the user got correct and show the total score of the user (out of 10)

Demo and submit source code to Camino

When Submitting the Code...

Add comment at the top of the page with...

- Your name
- Course title
- Lab number
- Lab time and date

```
/* Emma Allegrucci  
 * COEN 10  
 * Lab 5  
 * Monday 2:15pm  
 */
```

Helpful Resources

*** “The C Programming Language, 2nd Edition” ***

C: <https://devdocs.io/c/>

C: https://www.tutorialspoint.com/c_standard_library/index.htm

Terminal commands:

<https://cheatography.com/davechild/cheat-sheets/linux-command-line/>

Vim commands: <https://vim.rtorr.com/>

