

Create a settings file for vim

GOAL: Learn the procedure to log in to CSUS ECS Linux computers, practice some basic Linux shell commands and then create a file, using vim, to identify startup commands for *vim*. For Lab 1, please use the ECS Linux systems. You may use a Mac or other Unix systems for subsequent labs.

Step 1. Make sure your VPN software, GlobalProtect is installed and connected. If you are connecting from a non-campus computer and not on the campus network. Log in using your Sac State credentials to a Coding (ECS) computer (or your own Linux computer).

Step 2. LOGGING ON TO a Linux computer:

Use one of the terminal applications to login to an ECS system or use your MacOS terminal.

Putty and File Transfer - Windows

Mobaxterm - Windows

Terminal and scp - Mac.

STEP 3: Create the presets file for vim

Log onto the ECS Linux computer. You will be in your home directory. Stay in that directory.

Note: the command “cd” will move you directly to your home directory from wherever you are.

Type: **vim .vimrc** which is a settings-for-vim file. The file should be empty, but may not be.

Type: **i** to go into **insert mode** (It is a lower case “i”.)

Now you are in the file, ready to add content. First add your name as a comment. For example:

Type: **“Jimmy Smith** But, use your own name. This is the **only** line that needs the quote mark, which starts a comment line.

Line 2: Type: **set tabstop=8**

Line 3: Type: **set shiftwidth=4** (Enter each of these “set” lines on a separate line)

Line 4: Type: **set ai**

Line 5: Type: **syntax on**

Line 6: Type: **set cursorline**

Line 7: Type: **set number**

Line 8: Type: **set background=dark**

Press: **Esc** The escape key switches you from **Insert Mode** to **Command Mode**

Now, use the Vim Quick Reference Guide (in Canvas under files/BooksAndReferences) to practice moving around the file, using: *h, l, k, j, w, b, ...*

Type: **:wq** Save the file and quit.

Now, Type: “**vim .vimrc**” again to see the changes in vim settings (Cursor Line, line numbers, ...)

Note, you may adjust these settings after completing this lab. For example, I prefer to have “cursor line” off, so I would delete that line. (How would you delete a single line in vi?)

Please make any adjustments to this after submitting this assignment.

Step 4: Prepare your file for submission to Canvas

Note: the linux “script” command captures your keystrokes and output to a file. That’s how create a record of this interactive session as you complete this lab.

If you make a small mistake, just keep going. For large mistakes, please start over.

Type: script <YourName>_lab1.txt	<i>Example: script JimmySmith_lab1.txt</i>
Type: cat .vimrc	<i>This will display the contents of the file named “.vimrc”</i>
Type: pwd	<i>This will show your current directory</i>
Type: mkdir Junk	<i>This will create a directory named “Junk”</i>
Type: cd Junk	<i>This will change your current directory to “Junk”</i>
Type: pwd	<i>This will show your current directory</i>
Type: cd ..	<i>This will change your current directory to the parent directory</i>
Type: ls -l .vimrc	<i>This will show a listing of the file named “.vimrc”</i>
Type: exit	<i>This will take you <u>out of script mode</u> and save your file.</i>

Now, on your own.

Experiment with the following commands, you won’t be recording these so experiment a bit with these and other Linux commands. Use **man** to see more info on the commands and options:

Type: clear	To clear the screen
Type: uname -n	To see the system name, then use a “-a” option to uname command
Type: who	To see who’s logged into the system right now
Type: touch foo.txt	To create an empty file named foo.txt in the current directory
Type: touch Junk/foo.txt	To create an empty file named foo.txt in the existing Junk directory
Type: cp Junk/foo.txt b.txt	To copy <u>foo.txt</u> from the Junk directory to <u>b.txt</u> in current directory
Type: cd Junk	To change current directory to Junk
Type: ls -l	To list files in the current directory, a “long listing”
Type: rm foo.txt	To delete the file foo.txt
Type: cd ..	To change directory back to the “parent” directory
Type: ls -lt	To list files in the current directory, sort by date
Type: ls -ltr	To list the files in the current directory, sort by date in reverse order
Type: rmdir Junk	To remove the directory “Junk”
Type: exit	<i>When you are ready to leave the Linux machine.</i>

Step 5: Prepare to submit your file to Canvas

At this point, your file is on the Linux machine, but you need access to the file so you can upload it via your browser to Canvas.

Consult the lecture notes about moving the script file from your computer to Canvas.

Remember, a file that starts with a “.” is a hidden file, so a simple “**ls**” or “**ls -l**” won’t show it. You’ll need to add a “**-a**” option to **ls** to see all files, including hidden ones. Also, **Winscp** won’t see it without checking the “**Show hidden files**” option setting.

STEP 6: Turn in your work.

Go to Canvas and turn in two files:

- | | |
|-------------------------------------|------------------------|
| 1. .vimrc | <i>Your new .vimrc</i> |
| 2. <YourName>_lab1.txt | <i>The script file</i> |

STEP 7: TO LOG OFF EVERYTHING.

If you have not done so yet,

type “**exit**” *when you are ready to leave the Linux computer.*
for safety, depending on your location.