
CS135 Lab - Intro

Jeung-Sook Williams

jeung-sook.williams@unlv.edu



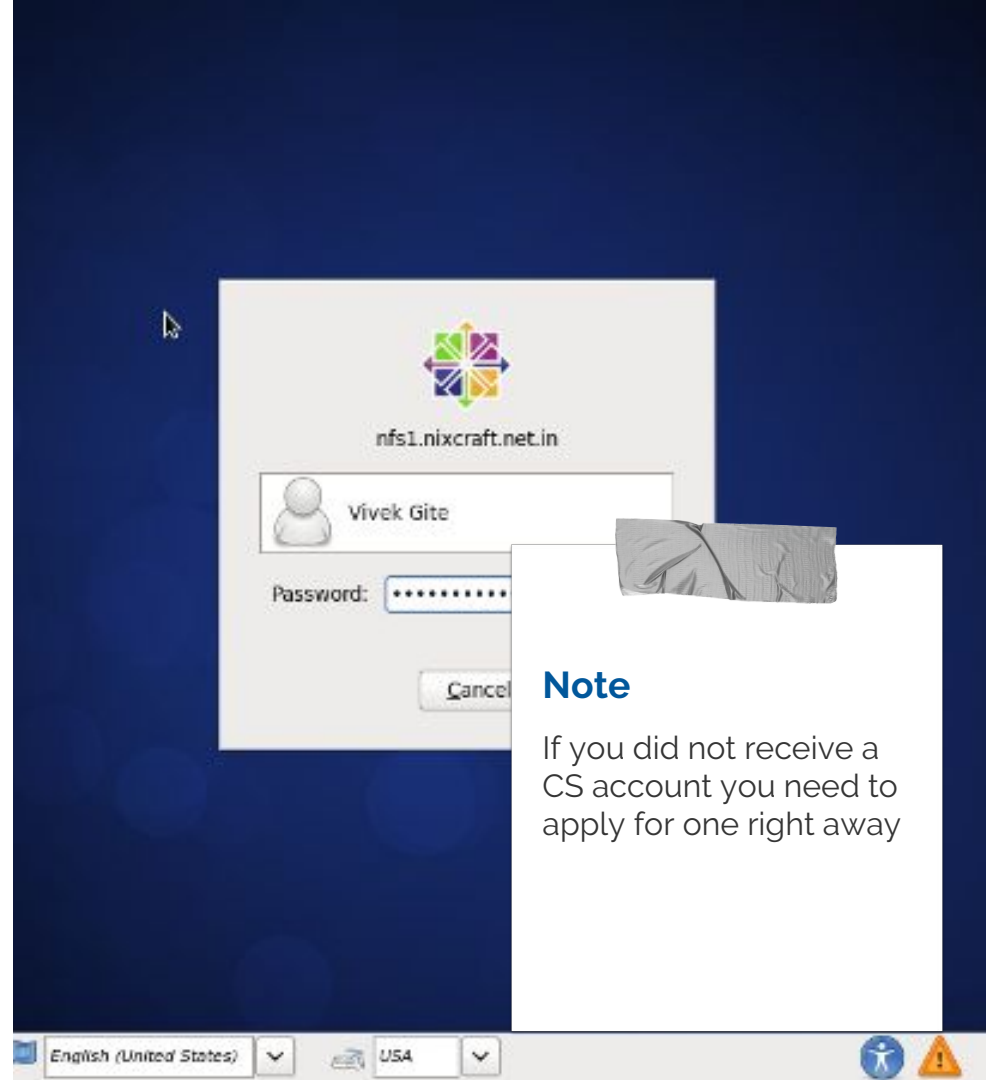
Summary

Learn how the lab works!

- Introduction
- Tux Website & Gitpage
- Change your password
- Copy and Compile a Program
- Sign into Bobby
- Submission
- Editing a Source File

Everyone Sign in Now

- Choose “Other”.
- Enter your username and password.

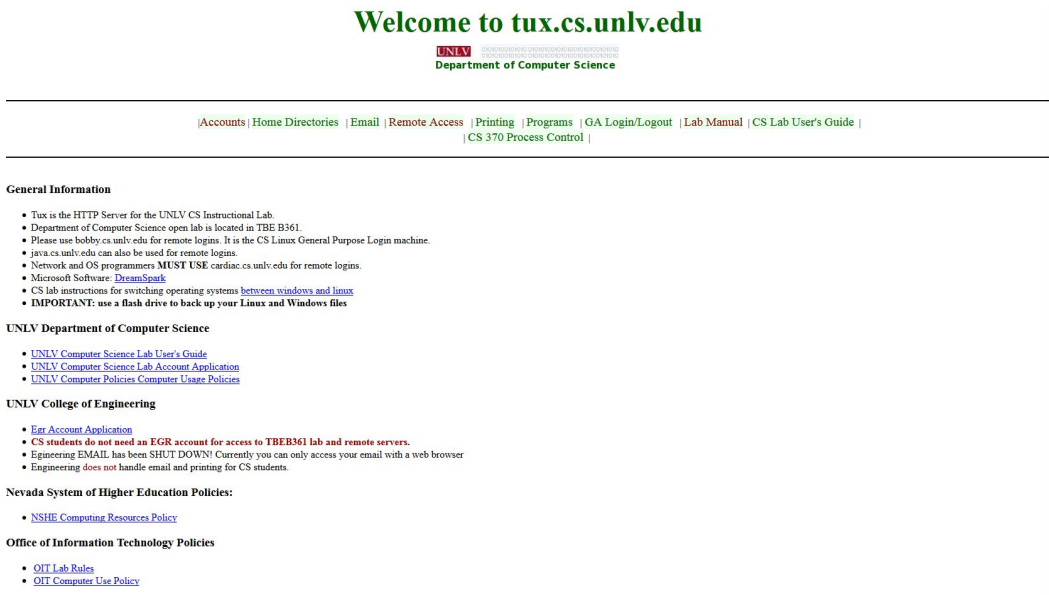


Tux Website (TBE B361 - Computer Lab Website)

This website contains all the information you need for this lab
Refer to it often for Linux commands, & the lab manual.

URL: <http://tux.cs.unlv.edu/>

Or just Google “UNLV tux”



The screenshot shows the homepage of the Tux website. At the top, it says "Welcome to tux.cs.unlv.edu" in green. Below that is the UNLV Department of Computer Science logo. A horizontal navigation bar contains links: Accounts, Home Directories, Email, Remote Access, Printing, Programs, GA Login/Logout, Lab Manual, CS Lab User's Guide, and CS 370 Process Control. The main content area is titled "General Information" and lists several bullet points about the website's purpose, login instructions, and important notes. Below this is a section for "UNLV Department of Computer Science" with links to the user's guide, account application, and policies. The next section is "UNLV College of Engineering" with links to account application and server access information. The final section is "Nevada System of Higher Education Policies" with a link to the computing resources policy, followed by "Office of Information Technology Policies" with links to lab rules and computer use policy.

Welcome to tux.cs.unlv.edu

UNLV
Department of Computer Science

[Accounts](#) | [Home Directories](#) | [Email](#) | [Remote Access](#) | [Printing](#) | [Programs](#) | [GA Login/Logout](#) | [Lab Manual](#) | [CS Lab User's Guide](#) | [CS 370 Process Control](#)

General Information

- Tux is the HTTP Server for the UNLV CS Instructional Lab.
- Department of Computer Science open lab is located in TBE B361.
- Please use [bobby.cs.unlv.edu](#) for remote logins. It is the CS Linux General Purpose Login machine.
- [java.cs.unlv.edu](#) can also be used for remote logins.
- Network and OS programmers **MUST USE** [cardiac.cs.unlv.edu](#) for remote logins.
- Microsoft Software: [DreamSpark](#)
- CS lab instructions for switching operating systems [between windows and linux](#)
- **IMPORTANT:** use a [flash drive](#) to back up your [Linux](#) and [Windows](#) files

UNLV Department of Computer Science

- [UNLV Computer Science Lab User's Guide](#)
- [UNLV Computer Science Lab Account Application](#)
- [UNLV Computer Policies](#) [Computer Usage Policies](#)

UNLV College of Engineering

- [Egr Account Application](#)
- CS students do not need an EGR account for access to **TBER361 lab** and remote servers.
- Engineering EMAIL has been SHUT DOWN! Currently you can only access your email with a web browser
- Engineering **does not** handle email and printing for CS students.

Nevada System of Higher Education Policies:

- [NSHE Computing Resources Policy](#)

Office of Information Technology Policies

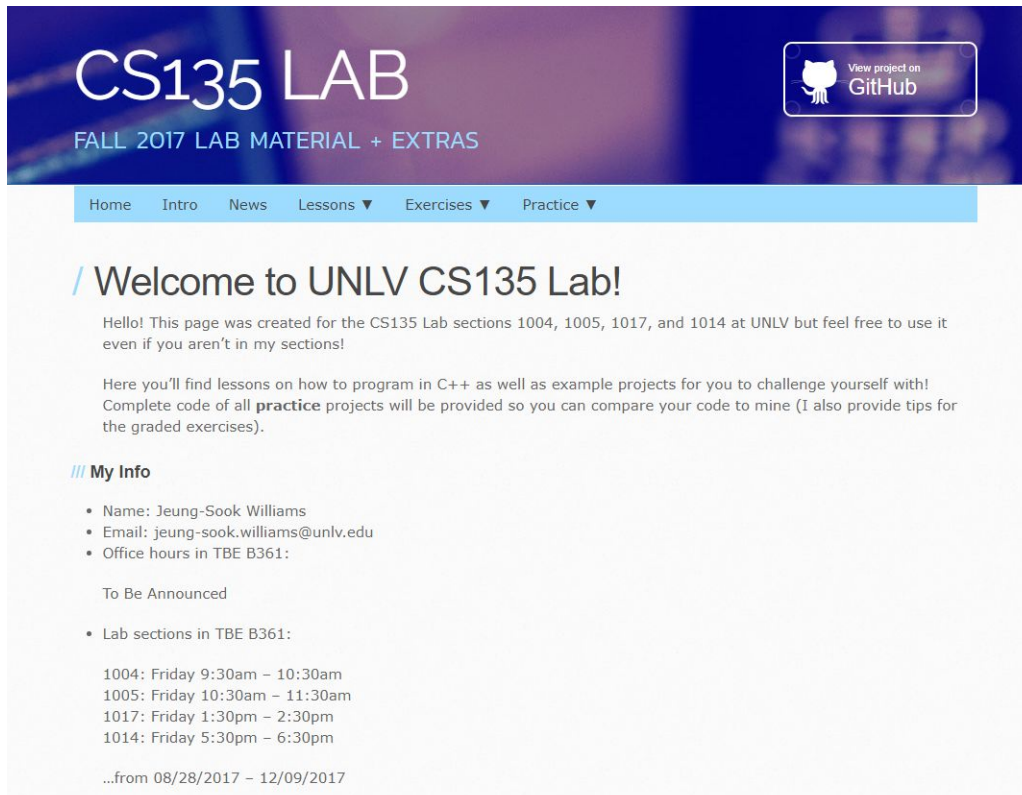
- [OIT Lab Rules](#)
- [OIT Computer Use Policy](#)

My GitPage

URL: <https://jeungsook.github.io/cs135/>

- Info
- Links
- News
- Lessons
- Exercises
- Practice Exercises

*Print my Lab Notes



The screenshot shows the homepage of the CS135 LAB website. The header features the text "CS135 LAB" in large white letters, with "FALL 2017 LAB MATERIAL + EXTRAS" below it. A GitHub logo and "View project on GitHub" link are in the top right. A navigation bar contains links for Home, Intro, News, Lessons, Exercises, and Practice. The main content area has a "Welcome to UNLV CS135 Lab!" heading, followed by a welcome message and a list of lab sections. The "My Info" section lists the creator's name, email, and office hours.

CS135 LAB

FALL 2017 LAB MATERIAL + EXTRAS

View project on GitHub

Home Intro News Lessons Exercises Practice

/ Welcome to UNLV CS135 Lab!

Hello! This page was created for the CS135 Lab sections 1004, 1005, 1017, and 1014 at UNLV but feel free to use it even if you aren't in my sections!

Here you'll find lessons on how to program in C++ as well as example projects for you to challenge yourself with! Complete code of all **practice** projects will be provided so you can compare your code to mine (I also provide tips for the graded exercises).

// My Info

- Name: Jeung-Sook Williams
- Email: jeung-sook.williams@unlv.edu
- Office hours in TBE B361:

To Be Announced

- Lab sections in TBE B361:

1004: Friday 9:30am – 10:30am
1005: Friday 10:30am – 11:30am
1017: Friday 1:30pm – 2:30pm
1014: Friday 5:30pm – 6:30pm

...from 08/28/2017 – 12/09/2017

Browse and run installed applications



Opening a Terminal

Note

You can open a terminal from the Applications menu:

Applications > System Tools > Terminal



```
willij6@var:~  
File Edit View Search Terminal Help  
[willij6@var ~]$
```

Changing your password

Instructions are located under the
“Accounts” tab on the Tux website.

LINUX	WINDOWS
Changing your CS password in Linux After logging into Linux, open a terminal. At the prompt, enter the command: passwd then press Enter. Once prompted, enter your current CS password and press Enter. After that, you will be asked to enter your new password twice (KEEP IN MIND: As you enter your new password, it will not show any typing occurring on the screen. Your password is still being entered as you type). Make sure your password conforms to the following guidelines. <ul style="list-style-type: none">• Must be at least 8 characters• Must contain an uppercase letter, a lowercase letter, and a number• Cannot be your name, your login name• Cannot contain blanks or dictionary words Note: This will change your CS password for both Windows and Linux.	***Changing your CS password in Windows*** After logging into Windows 7 press Ctrl-Alt-Del all at the same time. This will bring up a menu window with the Change Password option. Follow the instructions. NOTE: This will change your CS password for both Windows and Linux. cache: You can set your cache to a small amount; however this does will not matter because the cache for each user is save on each local machine she/he logs into and upon logout the profile gets deleted by the system. <i>Note: there are a few users where their profile does not get deleted if this is true for you please follow these steps otherwise your local profile will get full with temp files/cookies/cache then you will have problems login in to your CS account.</i> open Internet Explorer go to Tools select Internet Options select Settings Now set the "Amount of disk space to use:" to 1MB. click OK.

Compiling and Executing a Program

- What are Linux commands?
- What are arguments?
- What kind of commands are there?

The file, `exercise01.cpp` is located in the following directory: `~lee/cs135labs`.

1. Use the following command to copy the file into your account:

```
cp ~lee/cs135labs/exercise01.cpp yourfilename.cpp
```

(press Enter)

(you may choose what you want to call the file, but make sure the name ends with `.cpp`)

2. Use the `more` or `cat` command to look at what is in the file.

Compiling and Executing a Program

- G++ compiler
- Running a compiled program
- Submit the program

Compiler - a program that converts instructions into a machine-code or lower-level form so that they can be read and executed by a computer.

3. Compile the program with the command: `g++ yourfilename.cpp` (press Enter)
4. Execute (run) the program, type: `./a.out` (press Enter)
5. Submit the program: `mail -s "Your Name (first and last), Exercise #number, Lecture #number, Lab #number" -c username@unlv.nevada.edu jeung-sook.williams@unlv.edu < filename`

Logging into Bobby

How to Use SSH (in a terminal):

- To connect to a remote machine; use the following commands. For example if you would like to connect to our general purpose login machine --host names: bobby.cs.unlv.edu or cardiac.cs.unlv.edu

```
prompt# ssh username@bobby.cs.unlv.edu  
or  
prompt# ssh username@cardiac.cs.unlv.edu
```

- After entering the above command a prompt will follow:

NOTE: If this is the first time that you have connected to bobby/cardiac from your machine, SSH will give you an authenticity warning as follows...

*The authenticity of hosts 'bobby.cs.unlv.edu (131.216.23.6)' or 'cardiac.cs.unlv.edu (131.216.23.8)' can't be established. RSA key fingerprint is
xodif-lolyn-bohuh-foleg-cokec-boged-hihaf-helam-mosim-feros-pyxix
Are you sure you want to continue connecting (yes/no)?*

- Type " yes " otherwise you will not be able to connect to the desired host or machine.
- Now ssh will require you password, enter it at this time and you are ready to use bobby.

Editing a Program File with Emacs

- Open the file in emacs
- Add a comment to the **very top** of the file

5. Open a new terminal window.

6. Start emacs by typing the command: **emacs yourfilename.cpp** (press Enter)

A comment is a non-executable statement that provides information about a program to a reader. A comment begins with two forward slashes (/). The remainder of the line will be ignored by the compiler (g++).

7. Place a comment at the **start of the program file**. The comment should contain your name, lecture and lab section #s, and the exercise #.

8. Save your changes (**Ctrl-x, Ctrl-s**).

Editing a Program File with Emacs

- **Compile and run your program again**
- **Submit it**

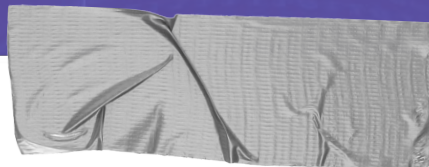
9. Move back to the other terminal window and try to compile the program.

10. If it does not compile, read the error message(s) and go back to the terminal window with emacs. Make the appropriate changes and save. Continue this process until the program compiles.

11. Run your program to confirm that it still works.

12. When you have finished editing your file, exit emacs with (Ctrl-x, Ctrl-c).

13. Submit the file



You are **Done!**
(Don't Forget to **Logout**).

You can leave or you can familiarize
yourself with the terminal, emacs, and
the tux website.