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CS120 Lab 1

Introduce Myself

- Name: **Heyan Huang**
- Major: Statistics & **Computer Science**
- Experience: OPT Statistical industry experience, & 2 years cs course study, I use Emacs editor during lab sections;
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- Technical Help: **211 CSAC**, mainly **MTWF** hours, try to find me there~~!!

Overview

1. Lab Rules
2. Linux Commands
3. Programming Environment Introcution
4. Sample Program

Lab Rules

1. **Quiz**:
   - At the beginning of the lab, you will have short answer **quizs**;
   - Count up to 15% for final score, as well as indicating attendence;
2. **No Late**:
   - Labs are due at the **end of lab section**;
   - Homeworks are due on **followed Monday**;
3. **Turn-in Requirements**:
   - for **Lab** and for **Homeworks**;
   - **electronic versions** is required;
   - **hard copy** as an extra;
   - **Electronic** copy can be checked in through "**cscheckin**" command. Specify **filename** and **course folder**, eg. "**cs120**"
4. **No Cheating**:
   - No **copying** codes or program Results from students;
   - No **copying** codes or program Results from website without understanding;
   - **hard copy** results must **match** your **Electronic** program's results;

Lab Rules

- No talking to neighbors; Either raise your questions or answer mine;
- I promote **independent & inspiring thinking**. You are free to ask questions with consideration for classmates.
- If you are doing lab sections well, I will be more than happy to teach you some other skills, like introducing **Emacs editor**, including some practical **interview questions** and coding practise in lab section.
- If you have difficulty with lab or homework, I am willing to help in CSAC, and I would feel happy to see you make progress.

Linux Commands

1. **pwd**: **p** rint **w** orking **d** irectory
2. **ls**: **l** i **s** t files and Directories
3. **mkdir**: **m** a **k** e **dir** ectory
4. **cd**: **c** hange your working **d** irectory
   - The "**.**" symbol refers to the working directory;
   - The "**..**" symbol refers to the working directory's parent directory;
   - The "**./**" symbol means execute script from my current directory. Dot (**.**), or current directory is never on the **PATH** (**echo $PATH** to check this) for security reasons and it never should be.
5. **script**: make typescript of terminal session
6. **exit**: The exit operation typically performs clean-up operations within the process space before returning control back to the operating system. (source: Wikipedia)

Programming Environment Introcution

1. Use **putty** to log into **wormulon.cs.uidaho.edu**. Use your **Vandal Username** and **password** to log on.
2. Use the **mkdir** command to create a directory called **labs**.
3. Use the **cd** command to move into the new **labs** directory.
4. Use emacs/nano to create a file called **fortune.cpp** and write the Fortune Teller program in the file. Add a block of comments to the beginning of the program that lists your name, section number, date, and the assignment number.
5. Use **g++** to compile the Fortune Teller program. You may need to type **./a.out** to run the program.

Sample Program

1. Modifications: Print a **welcome message** at the beginning of the program; Change the program so that the fortunes are **different**. **Make up your own fortunes**, try to keep them interesting.
2. Script: Use the **script** (make typescript of terminal session) command to create a printable output file. The command **script lab1output** will create a file called **lab1output**.
3. View Results: use the commands **pwd** and **ls** to show the current directory and its contents. Finally, use the **exit** command to end the script.
4. Final: Now You have a file called **fortune.cpp** containing the Fortune Teller program and a file called **lab1output** containing a 'transcript' of you running the Fortune Teller program and the pwd and ls commands. Print both files (using the **lpr** command) and turn them in.