

CS 172
Lab 3 - Linux and Debugging

Refer to Lab 2 for step-by-step instructions on using the Linux commands.

Linux Commands You Need for This Lab

Remember. . . folder and directory mean the same thing.

- `mkdir newFolderName` - creates a new folder (on Linux a folder is called a "directory")
- `cd folderName` - changes the working directory to the subdirectory called folderName
- `cd ..` (two periods) - changes the working directory to one directory level up
- `cd` (and nothing else) - changes the working directory to your home directory
- `dir` - shows a list of files in the current directory, including the filename, file size, and the date the file was last updated
- `pwd` - shows the **p**resent **w**orking **d**irectory
- `rm` - removes files (be very, very careful with this one...there's no undo)

1. Make sure that you have your file space organized for labs 1 and 2.

Open the Terminal window. Make sure that you are in your home folder (`pwd`).

Starting from your Home folder:

- You should have a folder named Lab1 (no spaces).
- The Lab1 folder should contain Program1.java, Program2.java, and Program3.java.
- The Lab1 folder should not contain any files that end with .class.
- You should have a folder named Lab2 (no spaces).
- The Lab2 folder should contain ManyStrings.java.
- The Lab2 folder should not contain any files that end with .class.

2. Make a new folder for Lab3.

- Download the file Factors.java from Canvas and store it in the Lab3 folder.
- Open the file in JGrasp.
- Debug the program. (You will see a for loop in the program. And yes, we haven't covered that in class yet. You should still be able to correct the syntax.)
- Run it multiple times and test it with the values 7, 12, and 91. Verify that the output is correct.

3. Add header comments. Header comments are required on all programs. Refer to lab 2 if you don't remember what they should look like.

Header comments and inline comments
are part of the grading rubric on
EVERY lab assignment.

4. In the terminal window, return to your home directory. (Type `cd` and press Enter.)
5. Make directories for Lab4, Lab5, Lab6, and Lab7.
6. Upload Factors.java to Canvas.
7. Now, you are ready to be graded on this lab. You will need to show the TA or instructor that you know how to use:
 - JGrasp for editing, compiling, and running a program
 - `cd`
 - `pwd`
 - `mkdir`
 - `rm`
 - `dir`