

LAB 06

RESOURCES

- Discussion slides ([./lab06slides.pdf](#)) - Copy of the presentation given by the TA
- gdb Tutorial (<http://www.unknownroad.com/rtfm/gdbtut/gdbtoc.html>) - gdb tutorial. Covers most if not all of what we are going over in class today

IDEA

This will be a lighter lab than you are accustomed to. The TA will guide you through steps required to use the Gnu Debugger (gdb) from the command line and also in the Eclipse IDE. There will also be a demo of ssh and ftp for working on the lab's machine from your own home.

By the end of the lab, you should be familiar with the basics of using gdb to help you and fix errors in your code.

IN-LAB ASSIGNMENT

Description

There is no actual assignment for you to do for this lab (due to your test on Friday). Instead, we will have a group exercise led by the TA going over a sample bad program trying to fix the errors in it.

The following are (loosely) the steps we will be doing as a group. You can follow on your own computer during the discussion or follow along with the presentation.

1. Download the broken.cpp ([./broken.cpp](#)), strstuff.cpp ([./strstuff.cpp](#)), and strstu

(./strstuff.h) files, as well as the corresponding makfile (./makefile). These files have a few problems we are going to fix with our awesome debugging skills.

2. Run make to compile the program. Notice that it doesn't exactly run very well.
3. Instead of banging our head against the wall with print statements and the like, we shall use gdb to fix up these errors.
4. The first thing we do is run gdb from the command line:

```
gdb debugfun
```

Notice that we passed gdb the executable name of our program, not our source code.

5. You are now using the gdb command line interface
6. Follow along with the TA to see the debugging process for this particular set of files. Refer to the given tutorial for more information on the commands used.

The other thing in lab is a demonstration of ssh and ftp. The information you are going to need is as follows:

```
user: your user name on the CISE machines
host: thunder.cise.ufl.edu or storm.cise.ufl.edu
port: 22
```

The 2 programs discussed are putty (<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>) for ssh communications and filezilla (<https://filezilla-project.org/>) for ftp/sftp. Both are free and very small programs. Be weary, when downloading FileZilla, it will ask you for a couple of trials. DECLINE THESE. You do not need these things if you have a linux machine. You can run ssh and sftp from the command line. This will not be discussed in lab, however.

Requirements/Deliverables

If you are present for the lab, you will get full credit. This lab will only count for 5 points instead of the usual 20 to reflect the fact that there is no assignment due.

Submission

There is nothing to submit.



Hints

Grading Distribution

5 points for being present during the discussion.

Optional Enhancements

