

## CS 300 In Class Valgrind Lab

ssh onto zeus and download cs300Valgrind.tar.gz from /home/CS300Public/2012

Untar and import the Valgrind Lab into Eclipse.

Team | Share [Link](#) to put it in your SVN Repository

The lab contains four C files, test1.c, test2.c, test3.c, test4.c, and a Makefile. You must find and fix memory errors in both files.

Use Valgrind to profile the code and see where some errors come from.

1) Run test1 from inside Eclipse. Very often if you have memory errors you will get no output on the console inside Eclipse.

2) Run test1 from the command line.

```
cd workspace/CS300ValgrindExample ;  
./dynamicArrays
```

3) Run test1 through valgrind at the command line

```
valgrind -v --leak-check=yes ./dynamicArrays
```

4) Run test1 through valgrind in Eclipse

**Right Click test1 | Profile as | Profile with Valgrind**

► In the errors, look for lines of code in your source files (not in /libc-2.X.so)

5) Fix errors! Iterate! Memory errors may mask other memory errors!

Use Valgrind to debug the other files as well.

Ask questions!