CS 61B Homework 1
Due 4pm Friday, September 8, 2006

This homework assignment is meant to make sure you can write, compile, and run simple Java programs. This is an individual assignment; you may not share code with other students. You will need to know how to compile and run Java programs, as described in Lab 1.

Copy the Homework 1 directory by starting from your home directory and typing the following:

```
mkdir hw1
cd hw1
cp $master/hw/hw1/* .
```

Problem 1

Write a program that reads a String from the keyboard. The program should then construct a URL for http://www.X.com/, replacing X with the String read in, and print the first five lines of the Web page at that URL in REVERSE ORDER; i.e., the fifth, fourth, third, second, and first lines.

We've already created a skeleton for you in the file OpenCommercial.java; you just need to fill it in. Use the println method to print each of the five lines, so that there's a carriage return at the end of each line.

To receive credit for this problem, you must follow these directions exactly:

1) Your solution must be in a file called OpenCommercial.java .
2) Do not edit any of the lines before the line that says "Replace this comment with your solution."
3) Your program must print only five lines from the given home page, and must print them in reverse order. Do not add any extraneous println statements. Do not modify the lines before printing them. The program skeleton we've given you prints a prompt before reading the String; don't change this prompt. Your program must produce EXACTLY the same output as our solution, because we will be using an automatic grading program dumber than a microwave oven.

Before you submit your solution, be sure to try compiling your program ON THE LAB MACHINES with "javac -g OpenCommercial.java", and be sure to try running your program ON THE LAB MACHINES using "java OpenCommercial". If you are working from home, be aware that there might be slight differences between your Java installation and ours, so you should always test your code on the lab machines just before you submit it. No partial credit will be given for programs that don't produce a portion of a Web page.

Problem 2

Write a program called "Nuke2.java" containing a class called Nuke2 whose main method reads a string from the keyboard and prints the same string, with its second character removed. (That's character number 1, since Java numbers characters in a string starting from zero.) In other words, after you run "java Nuke2", if you type in the string "skin", the program will print "sin".

(Note: your program might crash with an error message if you type in a string containing fewer than two characters. That's okay; your program only needs to work correctly on strings at least two characters long.)

To receive credit for this problem, you must follow these directions exactly:

1) Your solution must be in a file called Nuke2.java, and the main program must be in a class called Nuke2.
2) Your program must read just one string, then print the same string with the second character omitted, then exit. Do not print anything else. In particular, do not print a prompt.

Again, be certain that your program compiles and runs correctly on the lab machines before you submit it! The automatic grader is not charitable.

Submitting your solution

Warning: the submit command probably won't work until up to 24 hours after you login to a lab machine for the first time.

Make sure your programs run correctly on the lab machines. Change (cd) to your hw1 directory, which should contain OpenCommercial.java and Nuke2.java. Type "submit hw1".

After submitting, if you realize one of your programs is flawed, you may fix it and submit again. You will have to resubmit both files, even if you only change one. You may submit as often as you like. Only the last version you submit before the deadline will be graded.

If you only manage to do one of the problems before the deadline, you'll have to create an empty file with the name of the other program so that "submit hw1" will work.

This will be the standard procedure for submitting future homeworks and projects as well.