

## COMP 170 Lab 3, Part 1

Do Chapter 3 Practice Programs 1, 3, and 6

Start with any existing program you like or create these from scratch:

1. A number  $x$  is divisible by  $y$  if the remainder after division is 0. Write and run a program that prints out whether one *int* number is divisible by another, reading both numbers from the keyboard. Name your file Divisibility.java.  
**Hint: Use an *if-else* statement and two `System.out.println`'s.**
3. Write and run a program that reads 3 Strings from the keyboard, in no particular order (use *nextLine()*). Print out the String that would be second if they were arranged lexicographically, that is, in Unicode order.  
Name your file MiddleString.java.  
**Hint: Use nested *if-else-if* and *if-else* statements plus the String *compareTo()* method to determine which to print: find the smallest word first, then print the second-smallest. Given Strings d, a, c print c. Try 3 Strings in several orders.**
6. Write and run a program that reads in an integer. If the integer is  $> 100$  or between 50 and 75 (inclusive) output **YES**. Otherwise output **NO**. Name your file YesNo.java.

**Hint: Use an *if-else* statement along with `&&` and `||`.**

Examples of numbers that output **YES**:

101, 50, 75, 55, 70, 250.

Examples of numbers that output **NO**:

49, 76, 100, 80, 10, -50, 0.

Show me how you have completed these exercises.