CS308 Homework Assignment 6

Due date: ____________________

General info: Turn in all problems by paper and by email (to dbahr@regis.edu with “CS308 Homework” in the subject line).

Problem #1: Let’s program a simple calculator. First write code that asks the user for a math operation such as “1+3”, or “4/5”, or “8*17”, or “2%5”, or “89 – 23”. Use methods in the String class to figure out whether they typed a +, –, *, /, or %. Then figure out what two numbers they typed. Now tell the user what they typed (e.g., “You asked me to add 8 and 17.”, or “You asked me to divide 4 by 5.” or “You asked me to multiply 8 and 17.”, or etc.).

You may assume that they do not make mistakes when entering their math, and you may assume that they only enter integer numbers.

Problem #2: Now write methods called add, subtract, multiply, divide, and modulo. Each method should take two double numbers as input. Each method should return a double. (I didn’t say print, I said return.) Each method should do the obvious math operation on the numbers.

Problem #3: Now given the integers and operator (+, -, *, /, or %) that the user typed, call the appropriate method written in problem #3. Print out the answer returned by the method. For example, if the user typed 5/2, then your program should call the “divide” method with arguments 5 and 2. And then you should print “5 divided by 2 is 2.5.”

Hint: Your methods in problem #3 require doubles. So be sure to do any necessary casting to a double when you use these methods. Also, I do not want integer division. If they enter 9/4 then you should output the number 2.25.

Extra Credit (10 points): Write a JavaScript program that asks a user for their name. Then pop up an alert window that says “Hello _____” where the blank is their name. See my online notes for details about JavaScript and HTML. JavaScript is similar to Java but interacts easily with web pages.