

Assignment 02 – Java Concepts, Chapter 01: Introduction
Due: Sept-9

Exercise P1.6 pg 29 (modified)

Goal: learning how to write a Java program.

Write a program called **Sum10Reciprocals** that computes the sum of the reciprocals $1/1 + 1/2 + \dots + 1/10$. (Note: page 19 has an example that shows how to print out the sum of two numbers; if you need more help getting started, jump to the end of this document). Getting the correct answer may turn out to be trickier than it seems. After writing the program, check the results with a calculator & make a note of the results. Copy & paste your line of code & change second line so that the denominators are floating point numbers (1.0, 2.0, ..., 10.0) and check the new results.

We'll examine the mechanics of this problem later in Chapter 4.

Put a copy of your source code (**Sum10Reciprocals.java**) into a **.zip** file named **CS125-A02-YOURNAME.zip**, replacing **YOURNAME** with your actual first and last name. Note: if you have trouble creating zip files in the labs, refer to my tutorial on my Fall 2008 CS104 course page.

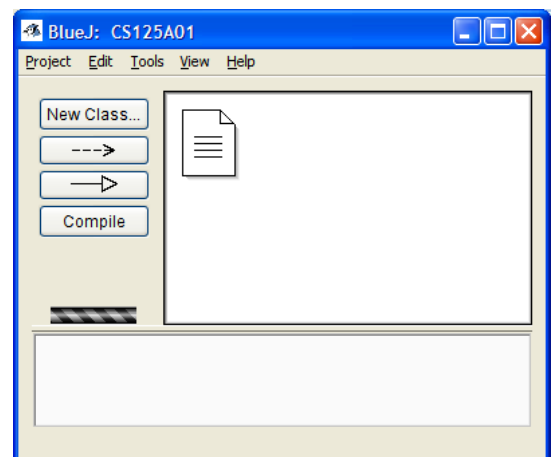
Upload the **.zip** file to Moodle.

The following rubric will be used for grading:

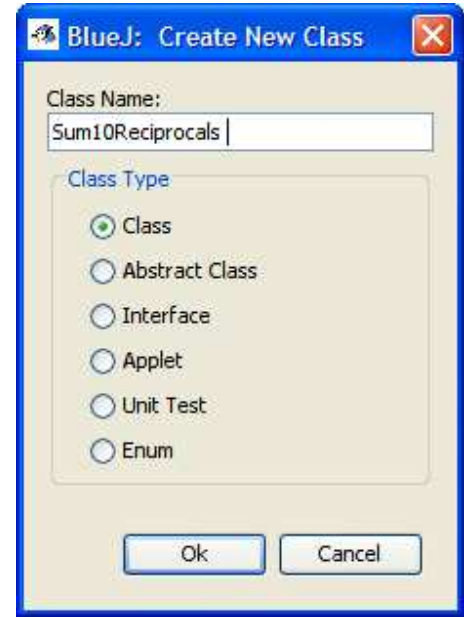
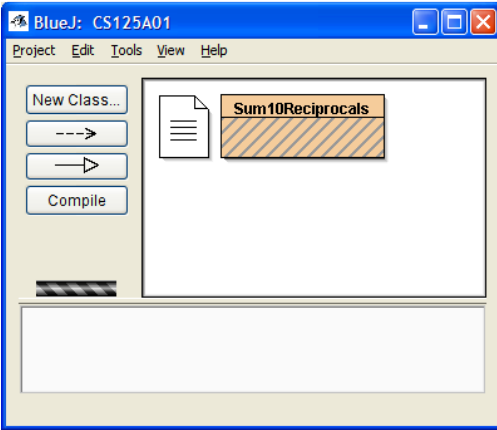
Description	Points
Correct filename(s) are used	2
Source code content	6
Source code compiles without errors	3
Program executes	3
Program outputs two numbers	2
Program output is correct	4
TOTAL POSSIBLE POINTS:	20

Appendix: More help getting started.

1. Fire up BlueJ. Click **Project** & then select **New Project**. Later, if you want to reopen the project to work on your code, you'll select **Open Project** instead.
2. Browse to where ever you want to save your work (I strongly recommend saving all your work in a folder named CS125 on the X drive). In the filename field type **CS125A01**.
3. You should now have something that looks like this:



4. Click the **New Class** button & type **Sum10Reciprocals** in the field labeled **Class Name**. Make sure that the **Class Type** is set to **Class** as shown to the right. Click **OK** & you should have something like the figure below.

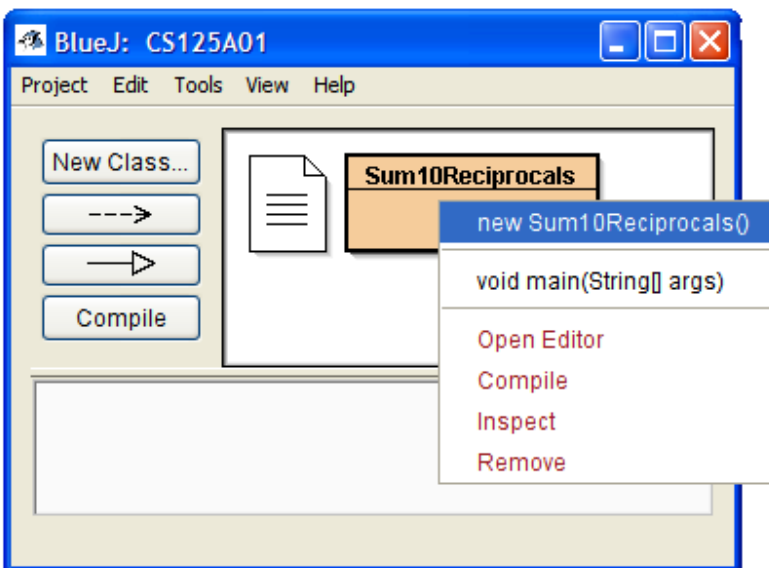


5. Double click the **Sum10Reciprocals** item. It should open up a code editing window.

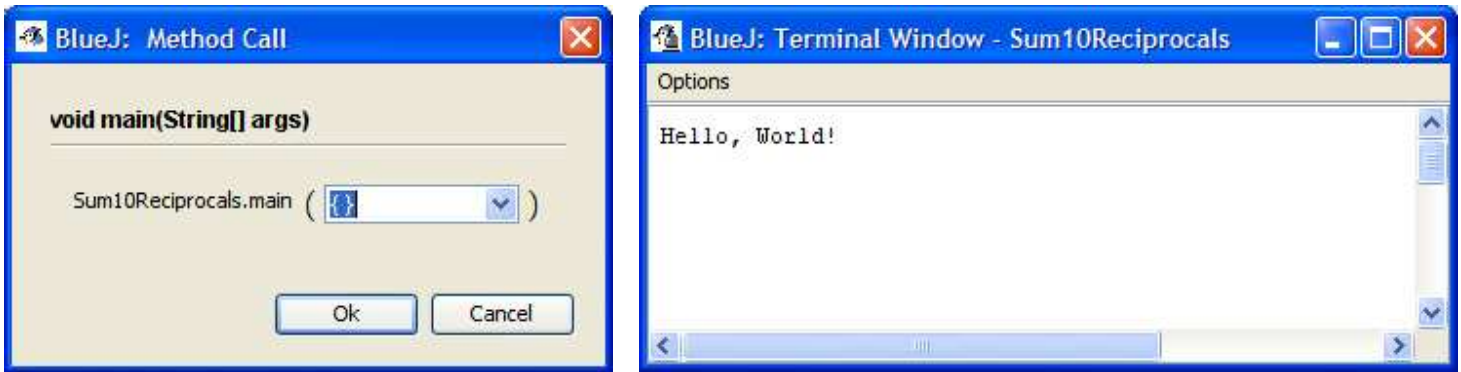
6. Inside the code editing window, select & delete all the code that BlueJ filled in for you. Type in the Sum10 program from page 15 of the text, but change **public class HelloPrinter** to **public class Sum10Reciprocals**.

7. Click **Compile**. If you have syntax errors, you'll need to correct them and recompile before you can continue.

9. Go back to the BlueJ project window. Your **Sum10Reciprocals** item should now look like this one (the crazy stripes are gone). Right click the **Sum10Reciprocals** item & select **void main(String[] args)**.



10. The BlueJ Method Call window will pop up (Shown below on the left). Later, we'll use this to pass all sorts of parameters to our method calls, but right now, we don't need to change anything so just click **Ok**. A BlueJ Terminal Window should pop up (shown below on the right) with your hello world message.



11. So now you've got a working program! Unfortunately, it prints "Hello, World!" rather than the sum of 10 reciprocals, but at least you have something to work with now. Go back up to the assignment instructions and carry on.