

Name: \_\_\_\_\_

## Practice Exercise 1

### Simple Program Creation

#### Overview

In this exercise, we will go through the steps to create and run a Java program. The goal of the exercise is to introduce you to the various tools we will be using.

#### **Part 1: Enter your program - jGRASP**

Type in the Java program below into jGRASP **exactly** as shown, we want it to produce errors for this exercise, so you can see what error messages look like. It is better to see errors for the first time now, than on an exam.

For the italiac text, replace it with your name and today's date.

```
// This program takes a name from the command line and prints it
// as part of the message that appears in the output window.
//
// usage: java Exercisel Yourname
//
// Author: your name
// Date:   today's date

public class Exercisel
{
    public static void main(String[] args)
    {
        / Test to see if a name was entered
        if(args.length <= 0){
            System.out.println('No name entered');
            System.exit(1);
        }
        // Since a name is present, print it with the message
        System.out.println("\nWelcome to Java, " + args[0]);
    }    // end main
} // end class Exercisel
```

**Part 2: Compiling**

Compile the Java code by clicking on the compile icon. The advantage of compiling from within jGRASP is the compiler output is kept and used for finding errors.

You will notice that the compiler has generated some errors. There will need to be corrected. Look at the error messages carefully, since they will often help you locate the problem. In some cases it will highlight the error in the source code.

**Sample “Compiler Error” Output:**

```
Exercisel.java:13: illegal start of expression
    / Test to see if a name was entered
    ^
Exercisel.java:15: unclosed character literal
    System.out.println('No name entered');
                        ^
Exercisel.java:15: unclosed character literal
    System.out.println('No name entered');
                        ^
Exercisel.java:19: ';' expected
    System.out.println("\nWelcome to Java, " + args[0]);
                                     ^
4 errors
```

**Part 3: Correcting the Program**

Using the compiler’s error messages, correct the program. Once you have made the necessary changes, recompile. If you receive no error messages from the compiler, that indicates a successful compilation.

**Part 4: Running the Program**

You can run the program by clicking on the RUN icon in JGrasp (person running). Any output will appear as a separate file that can be reviewed.

Since it gave the message “No name entered” rather than “Welcome to Java”, it is because a name needs to be entered. To do this, click on the toolbar’s Build, then Run Arguments. You’ll see a bar labeled “Run Arguments” appear above your source code. Enter your name here and Run the program again.

Demonstrate the completed program to the instructor or lab assistant.

Instructor/TA initials: \_\_\_\_\_