

vfcJava Lab 0: Hello World

1. Follow the JCreator Instructions Handout to set up an AITI workspace and create a project for Lab 0. For the file name, use HelloWorld.

2. Type the following code (including the comments) in the HelloWorld.java file:

```
/* The HelloWorld class prints "Hello, World!" to the
screen. */
public class HelloWorld {
    public static void main(String[] args) {
        /* Print "Hello, World!" */
        System.out.println("Hello, World!");
    }
}
```

Note: You should get into the habit of commenting your code.

3. Compile and run your program (for help with compiling and running your program, see the JCreator Instructions Handout). If you get errors when you try to compile or run the program, check that you have copied the code precisely character by character, with correct capitalization, and then try to recompile and run.

4. What do you see when you run the program?

5. Now change the HelloWorld code so that it prints out "Goodbye, World!" instead. This should be done by changing only one line of your program. Make sure to add a comment as well that reflects the change you made in the program. Compile and run your program and see what it prints out.

6. The command `System.out.println` prints out its argument and then starts a new line. Change your program so it prints out "Hello, World!" on one line and then prints out "Goodbye, World!" on the next line. Compile and run.

7. Take a look at the code you have written. It begins by creating a *class* called HelloWorld. We'll learn more about what a class is in later lectures. After the word HelloWorld in your code, there is an opening brace { which denotes the beginning of the class. Then all the way at the bottom of your code there is a closing brace } which denotes the end of the class.

8. Every Java file contains a class with the same name as the file. The class we just created called HelloWorld is in a file called HelloWorld.java. See if you can verify this. If we had a Java file named Racecar.java, in it you would find a class called Racecar. If we were to create a class called Student, we would create it in a file called Student.java.

9. Inside some classes, you'll find what's called the main method. The main method is denoted by:

```
public static void main(String[] args)
```

After this text you'll see an opening brace { which denotes the beginning of the main method and the second-to-last closing brace } which denotes the end of the main method. We'll see a lot of things in Java begin and end with braces.

10. Add these lines to your main method:

```
String name = "AITI";  
System.out.print("Hello, ");  
System.out.println(name);  
System.out.println("How are you today?");
```

Compile and run. How does `System.out.print` differ from `System.out.println`?

11. Change the text "AITI" to your name (for example, "Marta") and compile and run your code again. How has the output changed?

12. Change the line `System.out.println(name)` to the line `System.out.println("name");`

Why are the outputs different? Add comments indicating what each line does.

13. Play around with printing out different messages.