

Homework #1 Solution

(Java Programming for Beginners - OnLine)

1.1 Things you were expected to do in the first week:

- A. **Get familiar with the web portal:** This is the medium you will communicate with the instructor. The website has different sections
- Resources:** You will have folders dedicated for each purpose. The are for lecture notes, demo codes and some homework as well.
 - Messages:** You use this tool to communicate with me. If you click on my name or instructor role, I get the email from you, privately.
 - Forum:** this is the place where all of you hang around. If you post anything there, it is broadcasted. This is brainstorming place for you to discuss concepts among yourselves. Don't share your code with fellow students. I am not very active there, but, will respond time to time if needed
 - Announcements:** Read through them. They have lots of goodies. The "How To Pace Yourself" will guide you through the schedule and you will see what lectures needs to be completed before you should attempt a particular homework, quizzes and assignments
- B. **Install your choice of Java Development Environment:** You can use any IDE (Integrated Development Environment) with the text editor, debugger, and the Java Runtime Environment (JRE).

I use Eclipse, so, it may be advantageous for you to use Eclipse to follow along the lecture and demo videos. Follow the instruction document available in the resources section (*Install Java SDK and Eclipse.pdf*)

Hint: After installing JDK and Eclipse, open your Eclipse. You can open the Eclipse by clicking on the Eclipse executables. It will ask you select a workspace (a folder to store your projects), you can use a default location. It should look something like this:



You can go through the Overview, Tutorials etc or click on **Workbench** (or close this dialog) to directly open the package explorer and start working on your Java projects.

1.2 Create a new project in Eclipse called *FirstJavaProject*. Add a new public class called *FirstJavaFile*. Follow the instruction (*First_Java_Hello_Instruction.pdf*) available in the resource section.

1. Run the following code and observe the output.

```
public class FirstJavaFile {

    /**
     * @param args
     */
    public static void main(String[] args) {
        System.out.println("Hello Java World");
    }
}
```

2. Now change the code so that it displays *Hello* in one line, and *Java World* in another line.

Solution:

```
public class FirstJavaFile {

    /**
     * @param args
     */
    public static void main(String[] args) {

        //Solution 1: add \n after hello as well
        System.out.println("Hello\nJava World");

        //Solution 2: two println(s)
        System.out.println("Hello ");
        System.out.println("Java World");

    }
}
```

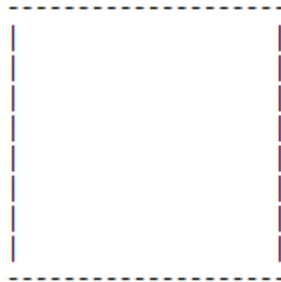
1.3 Create another public class called *bighello* to display the HELLO as shown below. At this moment, you only know how to use *System.out.print()* or *System.out.println()* methods

```
***          ***          ****          ***          ***          ***
***          ***          ***          ***          ***          ***
***          ***          ***          ***          ***          ***
*****          ****          ***          ***          ***          ***
***          ***          ***          ***          ***          ***
***          ***          ***          ***          ***          ***
***          ***          ****          ****          ****          ***
***          ***          ****          ****          ****          ***
```

Solution:

```
System.out.println("***      ***      *****      ***      ***      ***");
System.out.println("***      ***      ***      ***      ***      ***      ***");
System.out.println("***      ***      ***      ***      ***      ***      ***");
System.out.println("*****      *****      ***      ***      ***      ***      ***");
System.out.println("***      ***      ***      ***      ***      ***      ***");
System.out.println("***      ***      ***      ***      ***      ***      ***");
System.out.println("***      ***      *****      *****      *****      ***");
```

1.4 Create another public class called *box* to display a box as shown below. Remember that at this moment, you only know how to use *System.out.print()* or *System.out.println()* methods.



Solution:

[illegible]