

New York University Computer Science Department Introduction to Software Development

Dr. Anasse Bari

Homework#1: <u>Getting Started with Eclipse and Java</u>

Deadline: See NYUclasses for the deadline, 15% off per day after the deadline (3 days

maximum).

Learning Objectives:

- Getting familiar with Eclipse
- Writing simple programs in Java
- Learning the scanner class in Java
- Learning to explain basic programming concepts

Please read the guidelines carefully to avoid receiving a zero on the HW:

- Please use the following naming convention "ExerciseX.java", where X is the number of the exercise. Please apply this convention to all future homework assignments during the semester. Also please attach the answers for exercises 4 and 5 in a word document and include it within the HW's zip file.
- Compile and run the program for each exercises.
- Make an archive (zip file or compressed file) with all the java files (the .java files NOT the .class files) and post it on NYU Classes (StudentName_Homework_X.zip)
- It is your responsibility to make sure that the Zip files have your actual files. You
 may send the file to yourself by email to double check before you upload on NYU
 classes.
- If the graders cannot open the file, you will receive a grade of zero.
- If you send the .class files instead of the .java files (source files) you will receive a zero.
- Please do not send the entire project, the Java file for each exercise is all that we need
- Cheating will be severely addressed with an immediate zero on the homework and a report to the academic advisor and the administration.
- You will automatically lose 50% of the points for an exercise if the program does not compile and run correctly.
- The number of points for each questions is as follows:

Exercise 0. (10pts) Write a computer program in Eclipse that displays your first name and your major (each in a separate line) on the screen.

Exercise 1.(10pts) Write a java program that displays the result of

Exercise 2.(10pts) Write a java program that displays the following table to the screen:

Α	В	C
1	5	9
8	7	9
1	6	0
1	7	9

Exercise 3.(20pts) Write a computer program that asks the user for their name and will reply with a message that includes their name..

Hint: use Scanner.

Exercise 4.(20pts) Answer the following questions in your own words in no more than 4 sentences per question:

- What is a computer what are the main component of computer hardware?
- Explain the compilation process.
- What is the difference between an interpreter and a compiler?
- What is Java Virtual Machine?
- Define the following terms in no more than two sentences:
 - ➤ High level Language
 - Machine Language
 - > Software Development
 - > Programming
 - ➤ Algorithm
 - ➤ Integrated Development Environment

Exercise 5.(30pts) Find the compilation errors on the following programs:

5.1)

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Java - Test/src/Hello.java - Eclipse
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                     2 public class Hello{
 ₄ 뾸 src

♣ # (default package)

                   3∘
                            public static void main(String[] args) {
    ≥ ☑ Hello.java
                                  System.out.println("Hello, World");
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                              System.out.println("Hello, World");
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                  4
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5.3)

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🗸 🐸 Test
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                       public static void main(String[] args) {
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                            System.out.println("Hello, World")
 → M JRE System Library [JavaSE-1
                 5
                        }
                 6 }
```