Lab #1 (2.5%)

Notes

Folder organization for solutions on the student's account:

```
z:\
|
|--Programming01
|----Lab01Problem01
|----Lab01Problem02
|----…
|----Lab02Problem01
|----…
|--Programming02
```

JDK: http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html

IDE: http://www.eclipse.org/downloads/eclipse-packages/ (Eclipse IDE for Java Developers)

Problem #1: "Hello, World" (0.5%)

Topics: general steps of the application development (creation, compilation, execution), standard output, syntax errors

Description: the program prints out "hello, world".

Sample output:

```
Hello, World!!!
```

The compiled program should be started from the IDE and from its folder.

Task #2: "A Message in a Rectangle" (0.5%)

Topics: standard output, output of multi-line text.

Description: the program prints a specific message surrounded by asterisks.

Sample output:

```
********************
*I like programming!*
********************
```

Task #3: "What is your name?" (0.5%)

Topics: standard input, class Scanner, variables, strings, string concatenation.

Description: the program asks for a user name and then greets the user.

Sample:

```
What is your name? John Doe
Hello, John Doe!
```

Task #4: "Sum of Two Integers" (0.5%)

Topics: int data type, its range, addition, integer overflow, class Scanner, variable assignment, output of text and numbers in the same message, run-time errors.

Description: the application asks to enter two integer numbers and prints the sum of them.

Sample:

```
1st number? 17
2nd number? 25
17 + 25 = 42
```

Task #5: "Volume of a rectangular box" (0.5%)

Topics: integer multiplication, output of text and numbers in the same message.

Description: the application asks to enter three integer numbers, which represent dimensions of a rectangular box, and then prints the volume of the box.

Sample:

```
1st dimension? 4
2nd dimension? 3
3rd dimension? 5
The volume of the box (4x3x5) is 60
```

Home Reading: Liang Introduction to Java Programming 8th ed. Chapter 1.