Alexandria University

Faculty of Engineering

Computer and Systems Engineering
Department

CS122: Data Structures I

Assigned: Monday, Feb. 21st , 2022

Due: Monday, Feb. 28th , 2022

Assignment 1
Introduction to Java & Git

1 Objectives

1. Getting Started with JAVA Programming Language.
2. Becoming familiar with Java IDE (e.g., eclipse)
3. Using git for code versioning control

2 Environment Setup

Please follow the instructions in the tutorials.
1. First of all, you have to install Java Development Kit (JDK). You can read more about
JDK from here. You can download JDK 8 from here. Follow the setup instructions accordingly.

2. You are free to use any IDE of your choice as Eclipse or Netbeans.
However, It's recommended to use eclipse for JAVA. You can download it from here.

3 Simple Calculator

It is required to implement a simple calculator that supports two operations: addition and
division.

4 Notes

● You may need to add the path of your JDK to Windows PATH variables.
   For troubleshooting follow instructions here.
● You should work individually.
● No late submission is accepted.

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5 Integration

Your calculator class should implement the following **ICalculator** interface.

```java
public interface ICalculator {
/**
* Adds given two numbers
* @param x first number
* @param y second number
* @return the sum of the two numbers
*/
int add(int x, int y);
/**
* Divides two numbers
* @param x first number
* @param y second number
* @return the division result
*/
float divide(int x, int y) throws RuntimeException;
}
```

6 References

1. [Installing Java and Eclipse.](#)
2. [JAVA Programming Tutorial.](#)
3. [JAVA Classes and Objects](#).