Alexandria University
Faculty of Engineering
Computer and Systems Engineering
Department



EEC-3E1: Data Structures Assigned: Sun, Oct. 2nd , 2022

Due: Sat, Oct. 8th, 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.

Alexandria University
Faculty of Engineering
Computer and Systems Engineering
Department



EEC-3E1: Data Structures Assigned: Sun, Oct. 2nd , 2022

Due: Sat, Oct. 8th , 2022

5 Integration

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

```
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

* @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.