Department of Computer Engineering Faculty of Engineering UNIVERSITY OF PERADENIYA

CO225: Software Construction

Lab 06 : Unit testing with JUnit

Objective:

In this lab you will learn test-driven development (TDD) with JUnit. You should also pay attention to the quality of the code.

In this laboratory class you are expected to develop JUnit tests to check the accuracy of the method implementations using a few basic commands. The given skeleton code provides you a starting point and you must pay attention to the order in which the lab must be completed.

You can try out the wide scope of functionalities of JUnit during the lab as well. The tests are expected to assess the internal logic and branches of the methods, ensuring proper validation of their behavior. Aim to cover various edge cases, error conditions, and execution paths within the methods to enhance robustness and reliability.

Tasks:

- A. Write blackbox tests in JUnit to exercise the code for the two methods *before* writing the code for the methods.
- B. Once you have written the blackbox tests, complete the implementation of the methods.
- C. Now write additional glassbox tests to ensure good code coverage.