

# Assignment 3

---

**Student Name:**

**Grader Name:**

**Student UIN:**

**Grader UIN:**

---

**Reading Assignment:** How to Program Java, 9th edition

- Chapter 7 – Arrays and ArrayList
- Chapter 8 – Classes and Objects: A Deeper Look
- Chapter 9 – Object-Oriented Programming: Inheritance

**True or False:**

1. The first element in every array has index zero and is sometimes called the zeroth element.
2. In handling exceptions, the `catch` block contains the code that may **throw** an exception, and the `try` block contains the code that handles the exception if one occurs.
3. By convention, the parameter named `args` can be employed to handle command-line arguments. This parameter is of type `String`.
4. Static class variables and methods exist, and can be used even if no objects of that class have been instantiated.
5. When using datagram sockets, packets are guaranteed to arrive in the order they are sent?

**Short Questions:**

1. What needs to be specified when creating an `array` object?
2. Explain the *enhanced for* statement.
3. What does a type followed by an *ellipsis* (...) indicate in a method's parameter list?
4. Explain why a `static` method cannot access non-static class members.
5. What is the protocol used to establish stream sockets in Java?

**Programming Challenges** In Assignment 1, you wrote pseudocode for an application that displays a sum (e.g.,  $3+5$ ), prompt the user for an answer, and then reports whether the submitted answer is correct. You subsequently implemented this application in Java. The current challenge is to port your application to Android.

1. Implement your application in Android.
2. Using Eclipse and SVN, commit your code as a project labeled `Android3`.