

Assignment 1

Student Name:

Grader Name:

Student UIN:

Grader UIN:

Reading Assignment: How to Program Java, 10th edition

- Chapter 1 – Introduction to Computers and Java
- Chapter 2 – Introduction to Java Applications
- Chapter 3 – Introduction to Classes, Objects, Methods and Strings

True or False:

1. The arithmetic operators *, /, %, + and - all have the same level of precedence.
False. The operators *, / and % are higher precedence than operators + and -.
2. Java considers the variables number and NuMbEr to be identical.
False. Java is case sensitive, so these variables are distinct.
3. Variables or methods declared with access modifier **private** are accessible only to methods of the class in which they are declared.
True.
4. Variables declared in the body of a particular method are known as instance variables and can be used in all methods of the class.
False. Such variables are called local variables and they can be used only in the method in which they are declared.

Short Questions:

1. What is the naming convention for method?
By convention, method names begin with a lowercase first letter and subsequent words in the name begin with a capital letter.
2. What is special about a **static** method?
A **static** method is special, because one can call it without first creating an object of the class in which the method is declared.
3. Are primitive-type local variables initialized by default?
Primitive-type instance variables are initialized by default. However, local variables are not initialized by default.
4. The primitive type double is employed to store what type of numbers?
The type double is used to store floating-point numbers.

Programming Challenge: Pseudocode is an informal language that helps develop algorithms without having to worry about the syntax of a programming language. It is especially useful for developing algorithms that will be converted to structured portions of Java programs.

1. Write pseudocode for an application that prompts the user for two (or more) integers, computes the average, and then reports the answer to the user.
2. Implement your application in Java.
3. Using IntelliJ IDEA, Git, and GitHub, commit your code as a project labeled **Java1** under **Students/<GitHubID>/**, where **<GitHubID>** should be replaced by your username on GitHub.