CSCI 4513 Web Site Programming and Design

Homework Assignment 3

Due Date: Midnight, Feb. 6, 2022

Name/ ID: Kaleb

Q1. Fill in the blank. (1 point x 3)

The Java programming language allows you to define a class within another class. Such a class is

called an inner classes which has four type in it such as (**1) Member (2) Static Member**

**(3) Local** and anonymous inner class. Compelling reasons for using inner classes include the following three reasons. It is a way of logically grouping classes that are only used in one place. It increases encapsulation. It can lead to more readable and maintainable code.

Q2. Fill in the Blank to produce the output given below. (1 point x 4)

*package class\_ex;*

*public class OuterClass {*

*//field*

*private int num=3;*

*class InnerClass{*

*public void print(){*

*System.out.println(num);*

*}//print*

*}//IC*

*}//OC*

*public class Class\_ex {*

*public static void main(String[] args) {*

*//activate method1*

*OuterClass* ***(8) outer*** *= new OuterClass();*

*OuterClass.InnerClass* ***(9) inner*** *= outer.new InnerClass();*

*//activate method2*

*//OuterClass.InnerClass inner = new OuterClass().new InnerClass();*

*inner****.(10) print();***

*}//main*

*}//Main*

output: 3

Q3. Fill in the Blank on a Genetic Class to produce the output given below. (0.5 point x 6)

*package abc;*

*public class Abc \_\_\_\_\_\_\_\_\_<T>\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ {*

*public static void main(String[] args) {*

*private T t;*

*public Abc(T, t){*

*this.t = t;*

*}*

*public \_\_\_\_T\_\_\_\_\_\_\_\_\_\_\_\_\_ get(){*

*return t;*

*}*

*Abc <String> ts = new Abc<String>("Genetics");*

*Abc <\_\_\_\_****Integer****\_\_\_\_\_\_\_\_\_\_\_> ti = new Abc<\_\_\_****3****\_\_\_\_\_\_\_\_\_\_\_\_\_>(3);*

*Abc <\_\_\_\_\_****String****\_\_\_\_\_\_\_\_\_\_> tw1 = ts;*

*Abc <\_\_\_\_\_\_****Integer****\_\_\_\_\_\_\_\_\_> tw2 = ti;*

*System.out.println(tw1.get());*

*System.out.println(tw2.get());*

*}//main*

*}//Main*

Run:

Genetics

3

Note) Submit it through Assignments tab in D2L.