



COMP 248 - Winter 2016

Tutorial 2

Question 1

Predict the output of the following program. Then run it to make sure your answers are right.

```
package string;
public class I2Question1
{
    public static final String sentence = "My school name is Concordia.";
    public static void main (String[] args)
    {
        int position = sentence.indexOf("school");
        String firstPart = sentence.substring(0, position);
        String afterChange = sentence.substring(position + 6);
        String newString = firstPart + "university" + afterChange;
        System.out.println("The line of text to be changed is: ");
        System.out.println(sentence);
        System.out.println("I have rephrased the line to read:");
        System.out.println(newString);
    } // end of main ()
}
```

Question 2

The following Java program contains several syntax errors. Identify and correct them. Then try to compile the program to make sure your answers are right.

```
import java.util.Scanner;
public class q2
{
    public static void main (String[] args);
    {
        Scanner keyboard = new Scanner (System.in)
        final double tax_rate = 0.20; // 20 % salary tax
        int salary;
        double tax, net_salary;
        System.out.print ("Enter the salary:" );
        salary = keyboard.nextInt();
        tax = salary * Tax_rate;
        net-salary = salary - tax;
        // Print output */
        System.out.println ("Salary before Tax:  + salary);
        System.out.println ("Tax: " + tax);
        System.out.println ("Net Salary after Tax: " + net_salary;
    }
}
```

Question 3

Predict the output of the following program. Then run it to make sure your answers are right.

```
package string;
public class q3{

    public static void main(String[] args)
    {
        System.out.println("\n\tGreeeeetings.\rWhen you want to run your JAVA Program \b\b\bmake sure,\nthat you " +
            "correct the syntax eerrors \"Cooool Advice \\fun\" from. \n ' someone \t \t want to help you!\n ' ");

    } // method main

} //class q3
```

Question 4

Write a program to calculate a rectangle area. The user should input the length and width of rectangle.

Question 5

Predict the output of the program and make sure your answers are right by running them.

```
public class q5
{
    public static void main(String[] args) {
        int x = 10;
        int y = 12;
        int iResult;
        float w = 4.5f;
        float z = 8.2F;
        float dResult;

        iResult = (int) (z / w);
        dResult = y * x;
        System.out.println("iresult now is: " + iResult + " and dResult is: " + dResult);
        x = 2;
        dResult = z / x;
        System.out.println("dResult now is: " + dResult);
        x = 10;
        y = 4;

        //Notice that the following casting will be useless (too late)
        dResult = (float) (x / y);
        System.out.println("dResult now is: " + dResult);
        // The proper way to do so would be as follows
        dResult = (float) x / y;
        System.out.println("dResult now is: " + dResult);
    }
}
```